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THE

CLINICAL GUIDE,

OR

A Concise View

OF THE LEADING FACTS,

ON THE

HISTORY, NATURE, AND TREATMENT

OF

THE VARIOUS DISEASES

THAT FORM

THE SUBJECT OF MIDWIFERY,

OR ATTEND THE

PREGNANT, PARTURIENT, AND PUERPERAL STATES:

INTENDED AS

A Memorandum-Book for Practitioners.

To which is added

AN OBSTETRICAL PHARMACOPŒIA,

Divided into Three Parts;

Viz.—MATERIA MEDICA,

CLASSIFICATION, & EXTEMPORANEOUS PRESCRIPTION.

BY

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HAS JUSTLY RAISED TO THE FIRST RANK

IN MEDICINE,

THIS WORK IS INSCRIBED,

AS

A TRIBUTE OF RESPECT,

BY THE AUTHOR.

PREFACE.

IN every ſcience, the principles of which are extenſive, for the ſucceſs of their application to practice, certain diviſions have been found neceſſary;—theſe, by confining in ſome meaſure their limits, render an acquaintance with the whole leſs requiſite, and make the ſeveral parts, at the ſame time, in ſome degree, independent of each other. Hence has ariſen a variety of departments in the ſame profeſſion. In none is this more diſplayed, or with greater advantage, than in Medicine. From a ſuperficial conſideration of the nature of diſeaſe, and particularly of the difference of the means neceſſary to its cure, a diviſion of this ſcience originally took place into two departments, of Phyſic and Surgery. This diviſion, however, was too extenſive. New diſcoveries daily increaſed the number of ſubjects comprehended under each, and a ſtill farther diviſion was

found neceſſary to be made. Thus, on the inſtitution of univerſities, at a very early period, we find a variety of departments eſtabliſhed in Phyſic: Surgery continued for long in its original ſtate; but the progreſs of civiliſed life, with its attendant evils, rendered alſo a change at laſt neceſſary here. Thoſe ſituations, which were formerly conſidered as merely natural, and the effect of unavoidable conſtitutional cauſes, came more frequently to require medical aid: a diviſion therefore of Surgery took place, comprehending that part of it concerned in the delivery of pregnant women. From this period it has received a greater ſhare of attention than formerly, and a zeal for its improvement which has ariſen, increaſed the number of ſubjects originally comprehended under the title of Midwifery. Its relation, however, to Surgery ſtill in ſome meaſure prevails, and the reputation of the accoucheur is generally eſtimated in proportion to the dexterity he diſplays where difficulties occur in conducting the operation of delivery. From the other branches of Surgery it chiefly differs in this, that while the ſurgeon has the advantage of the eye to direct the uſe of his inſtruments, the accoucheur muſt truſt entirely to the feel as the guide of his conduct, in judging both of the morbid ſtate, and of the means of relief.

The preſent work is the ſubſtance of a Courſe of Lectures, delivered by the author in Edinburgh ſome

years ago on this fubject. He has now attempted to condenfe them into the form of a fyftem, a plan feldom hitherto aimed at by the numerous authors on Midwifery; and he has alfo dwelt on fome fubjects, of importance to an accoucheur, which have been rather flightly treated in other works.

To render it more ufeful, and fhew the relation between Midwifery and the other parts of the fcience, he has connected it with the two former volumes, publifhed under the title of "The Clinical Guide," comprehending Medicine and Surgery. The only difference in the plan of the prefent volume from the former ones is, the introduction of theory; which he found neceffary to connect the different fubjects of Midwifery, and to fhew their dependence on each other. This, however, wherever it occurs, may be paffed over, if difagreeable, and the facts, in regard to the nature and treatment of the different fubjects, only attended to.

Thefe three volumes now publifhed include all the practical fubjects of the profeffion, except the Difeafes of Infancy and early Childhood. This part the author intends as the fubject of an additional volume, tracing the progrefs of infancy from the firft dawn of exiftence to the age of puberty. The difeafes of infancy are perhaps lefs underftood than any other part in medicine, and they occur equally to the phy-

ſician, the ſurgeon, and the accoucheur, in the courſe of practice. They are not, therefore, properly to be conſidered as an appendage to Midwifery, or as belonging excluſively to the practice of the accoucheur.

The preſent volume it is hoped will be received with equal indulgence as the two former. Many parts of obſtetrical practice will be found placed in a new point of view.

The Prognoſtics of Midwifery will prove uſeful to every accoucheur commencing practice. They form a part which has hitherto been little treated in books of this kind.

CONTENTS.

INTRODUCTION - - - - Page 1

Peculiarities of the female conſtitution :

General peculiarities, - - - 2

Local peculiarities, or menſtruation, - - 5

Effect of thoſe peculiarities on conception,

Circumſtances neceſſary to conception.

Progreſs of the uterine contents - - - 26

Formation of maternal part,

Formation of fœtal part,

Communication betwixt them.

Changes of the uterus - - - - 34

In its enlargement,

In its increaſe of ſubſtance,

In its plethoric ſtate.

BOOK I.

PREGNANCY.

Definition - - - - - 41

Circumſtances marking its preſence - - ibid.

DISEASES OF PREGNANCY.

CLASS I.—Sympathetic - - - - 42

Dyſpepſia - - - - 43

Malacia - - - - Page 46
Cardialgia - - - - ibid.
Hyſteria - - - - - 47

CLASS II.—Plethoric—General pyrexial ſtate - - 51
Affection of breaſts - - - 52
Retroverted uterus - - - 53
Fixt abdominal pains - - - 59
Convulſions - - - - 60
Palſy - - - - - 63

CLASS III.—Mixt - - - - ibid.
Coſtiveneſs - - - - 64
Piles - - - - 66
Œdema - - - - 68
Spaſm - - - - - 69
Cough and Dyſpnœa - - - ibid.
Vomiting - - - - 70
Incontinence of urine - - - ibid.
Suppreſſion of urine - - - ibid.
Accidental diſeaſes during pregnancy - - 71
Dropſy - - - - ibid.
Fluor Albus - - - - 73
Hernia - - - - 74
Calculus - - - - 75
Nephritic complaints - - ibid.
Jaundice - - - 76
Venereal diſeaſe - - - ibid.
Salutary effects of pregnancy - - - 77
General treatment of pregnancy - - ibid.

BOOK II.

ABORTION.

Flooding - - - - - 94
Falſe conception - - - - 97

BOOK III.

PARTURITION.

Definition - - - Page 99
Diagnoſtics - - - - 100
Diviſion - - - - ibid.

CLASS I.—Natural labour - - - ibid.
Definition,
Hiſtory,
Stages of progreſs; viz.
Stage of acceſſion,
——— dilatation,
——— expulſion,
Theory of labour,
Treatment of labour,
Delivery of placenta,
Circumſtances preventing it,
Treatment neceſſary.

CLASS II.—Protracted labour - - 146
Definition,
Diagnoſtics,
Cauſes,
Treatment.

CLASS III.—Inſtrumental labour - - 163
Definition,
Diagnoſtics,
Principles of treatment.
1. Lever - - - - 167
Principle of its action,
Mode of application,
Situation to which applicable.
2. Forceps - - - 171
Hiſtory of the inſtrument,
Principle of their action,
Rules for their application,
Varieties of ſituation to which applicable.

3. Long ſciſſars and crotchet - - Page 183
History of the inſtruments,
Principle of action,
Mode of application,
Situation to which applied,
Preſentations ſuperſeding their uſe,
Treatment in pregnancy,
Premature labour.
Enlargement of pelvis, or SIGAULT's operation 199
History of the operation,
Mode of performing it,
Conſequences of the operation.
Dr. OSBORNE's improvement - - 206
Circumſtances neceſſary to its ſucceſs,
Opinion of its merit.
Cæſarian operation - - - 211
History of the operation,
Circumſtances in which it is unavoidable,
Mode of performing it,
Conſequences of the operation.
CLASS IV.—Manual labours - - - 227
Definition,
Their diviſion into two ſtages; viz.
Stage of preparation,
——— delivery:
Diviſion 1ſt, or footling caſe - - 230
Its treatment:
Diviſion 2d, or natal caſe - - 234
Its treatment:
Diviſion 3d, or tranſverſe caſe - - 236
Its treatment:
Diviſion 4th, or brachial caſe - - 237
Difficulties oppoſing delivery,
Different modes of delivery,
By turning,
By ſeparation of parts,
— ſpontaneous evolution,
General treatment of manual labours.

CLASS V.—Anomalous labours - - - Page 243
Flooding - - - - ibid.
Hiſtory,
Diviſion,
Cauſes,
Symptoms of the two ſpecies,
Treatment of the firſt ſpecies,
Compariſon of natural and artificial delivery,
Treatment of ſecond ſpecies,
Circumſtances neceſſary to its ſucceſs,
Mode of accompliſhing it,
Conſequences of flooding.
Convulſions - - - - 255
Hiſtory,
Cauſes,
Modes of treatment,
Palliative,
Radical.
Prolapſed funis - - - 259
Cauſes,
Treatment.
Plurality of children - - 261
Signs of twins,
Mode of treatment,
Ditto of placenta.
Extra-uterine labour - - 264
Hiſtory,
Modes of termination.

BOOK IV.

CHILD-BED.

Definition - - - - - 267
Peculiar circumſtances attending it,
After-pains,
Lochia.

Management of the uterus - - - - 270
Diſeaſes of child-bed - - - - 272
Generál affections:
Faintings - - - - - 273
Hæmorrhage - - - - 274
Local injuries:
Swelling of parts - - - - 275
Laceration of the bladder of urine and rectum - - 276
Laceration of the perinæum - - - 278
Rupture of the uterus - - - - ibid.
Inverſion of the uterus - - - ibid.
Inflammation of the uterus - - - 279
Prolapſus of the uterus - - - 280
Fevers - - - - 281
Weed, or ephemera - - - ibid.
Lacteal fever - - - - 282
Treatment of breaſts - - - - 283
Miliary fever - - - - 284
Puerperal fever - - - - 285

BOOK V.

PROGNOSTICS OF MIDWIFERY.

Signs of pregnancy - - - - 290
Signs of labour - - - - - 293
Opinion on the progreſs and nature of labour - - 294
Signs of child-birth - - - - 298
Signs of virginity - - - - 299

MANCHESTER MEDICAL SOCIETY

INTRODUCTION.

I. MIDWIFERY teaches the management of thoſe diſorders that attend women, from the moment of conception to their recovery after delivery.

II. The diſorders of women during this period are properly divided into three diſtinct claſſes, as peculiar to the pregnant, parturient and puerperal ſtates, which being all the effect of one common cauſe, or conception, this proceſs merits a previous and principal inquiry.

III. Conception is one of thoſe peculiar proceſſes it is impoſſible to explain. In all the more perfect animals, a union of the ſexes ſeems abſolutely neceſſary to its completion. In whatever manner alſo it takes place, the perfection of its operation *ultimately* depends on the female. Hence, though we cannot explain its nature, as eluding our reſearch, yet theſe circumſtances in the female, neceſſary to render it ſucceſsful,

we are enabled, with ſome certainty, to trace a point of conſiderable importance in practice.

IV. Since the female, then, is by nature more intimately concerned in the ſucceſs of this proceſs than the other ſex; ſo, independent of the organs in her fitted to perform it, we ſhould expect, on compariſon, to find a certain difference in the general habit of the ſex prevail; and this difference, or *Conſtitutional Diſtinction*, we therefore aſſume, as forming thoſe circumſtances neceſſary to the ſucceſs of conception, and on which, *perhaps*, it eſſentially depends.

CONSTITUTIONAL DISTINCTIONS OF THE FEMALE HABIT.

1. *General.*

V. Such a difference, or *conſtitutional diſtinction* betwixt the ſexes, has been long marked by authors, though not ſufficiently inſiſted on in the preſent view. It conſiſts in a certain lax ſtate of the ſimple ſolid, with an increaſed irritability of the nervous ſyſtem.

The former of theſe has a particular effect on the ſtate of the pulſe, and the different ſecretions. Thus the pulſe of women is always quicker and weaker than that of men; often to ſuch a degree, as to equal that which denotes the preſence of real diſeaſe. Hence, in all the diſeaſes of women, we can judge with leſs cer-

tainty by it than in the other ſex. Thus alſo, from the weaker circulation, the ſecretions, which depend greatly on the force with which the fluids are propelled into the ſecretory organs, are more ſparing, and the excretions diminiſhed in the ſame proportion; ſo that a fullneſs, or plethoric ſtate, of the ſanguiferous ſyſtem is neceſſarily produced. This plethora has been remarked by phyſicians as at all times attending the conſtitution of the ſex; and the tendency to it is alſo particularly favoured by their ſedentary life, and greater confinement than the male. From the ſame ſource of laxity in the ſolids, the action too of the lymphatic ſyſtem is much weaker than in the other ſex. Hence they are more liable to thoſe diſeaſes which depend on diminiſhed exhalation, particularly dropſy; and this diſeaſe is more apt to occur in them, from ſimple debility, without any local affection, than in the other ſex. A more favourable prognoſis, therefore, may be here generally formed.

VI. The increaſed irritability, again, of women is beſt diſplayed by the particular diſpoſition or temper of mind characteriſing the ſex, as well as the diſeaſes to which they are ſubjected.

"Thus (as Dr. CULLEN remarks) they are readily elated by hope, and as readily depreſt by fear; paſſing eaſily and quickly from one extreme to the other; eaſily pleaſed, and prone to gaiety; and as eaſily provoked to anger, and rendered peeviſh; liable from ſlight impreſſions to ſtrong emotions, and tenacious of none." Hence the proverbial deſcription of this conſtitution, as

the *Varium et mutabile femina quæ colligit ac ponit iram temere, et mutatur in horas.*

VII. That this ſtate of conſtitution deſcribed (V.) is neceſſary to conception, we infer from ſeveral obſervations.

1. It is agreed by all authors, that thoſe women who are of the moſt relaxed and weakly habit are, by experience, found to be the *greateſt* breeders.

2. Where, from their ſituation in life, by reaſon of labour or other hard exerciſe, women become robuſt, and approach the maſculine character, they either have no children at all, or ceaſe to have them ſoon.

3. Where women are late of marrying, ſo that a rigidity of fibre has begun to take place, and the conſtitutional diſtinction to depart, they are ſeldom mothers, or their children are few.

4. Where from debauchery, as in caſe of common proſtitutes, the natural irritability is leſſened, and the feelings rendered callous, barrenneſs generally enſues.

5. Fat women, in whom alſo the ſenſes are generally more torpid, have few, ſometimes no offspring. In proof of this, we have only to remark the ſtate of population in Holland, where this obeſity in the female proceeds to a morbid degree.

VIII. From theſe obſervations, detailed (VII.), ſince conception, we are led to preſume, as connected much with the preſence of this general difference of conſtitution betwixt the ſexes (V, VI.); ſo we ſhould next expect to find its preſervation ſtudiouſly provided for by nature, during the greater part of life, or, at leaſt, the

whole of that period of life, during which conception takes place; and that this is the caſe, is confirmed, when we examine next the *local peculiarities* of the female, the chief of which is *Menſtruation.*

2. Local.

IX. This conſiſts in a periodical evacuation of blood, from the uterus or ſeat of conception, the approach of which is marked for ſome time longer or ſhorter, according to the ſtate of the uterus, by a whitiſh ſerous diſcharge, which departing, aſſumes at laſt the proper red appearance.

The period when this arrives conſtitutes the proper acmé of the female ſyſtem, and forms the age of puberty of the ſex. In this climate, it commences at fourteen or fifteen; but in the warmer climates, where the body ſooner arrives at perfection, it diſplays itſelf at a period conſiderably earlier, as ten or twelve.

The duration of the diſcharge at each period is much diverſified with different individuals, and extends from two or three days, to ſeven or eight.

Its quantity alſo, and manner of flowing, are equally various. In ſome it ſeldom exceeds two or three ounces, and in others, though more rarely, it will amount to no leſs than a pound. In ſome it flows ſlowly, and imperceptibly, during the whole period. In others it is more rapid at once, and then intermits. Thoſe of the ſanguine temperament have been remarked as moſt liable to profuſion; thoſe of the phlegmatic as leaſt ſo.

Its quantity, however, varies in the ſame ſubject at different periods of its recurrence, and no certain rules can be drawn with reſpect to it.

The frequency of its recurrence is equally various in different individuals, as the other circumſtances attending it. At a medium, a lunar month has been mentioned as a proper diſtance between its repetitions; though the health of the female alone determines our opinion with reſpect to it.

X. From the acmé of the ſyſtem, then, whatever this be, this diſcharge continues without interruption, except during geſtation, and the period of nurſing, till what may be termed the turn or decline of life, of which it may be conſidered, by its total diſappearance at whatever time this takes place, as the leading mark. In this climate it commonly occurs ſome time betwixt the fortieth and fiftieth year; previous to which, as that ſtate of the uterine ſyſtem is beginning to be eſtabliſhed, which terminates its appearance, it becomes more or leſs irregular; a period when the health of the female is conſiderably affected, and to which much attention is generally paid.

XI. Every woman, then, whoſe uterine ſyſtem is complete, has this diſcharge for the greater part of life; and the more regular it is, the general health of the ſex is the more complete. Many authors have remarked, that the menſes, after the decline of life, have experienced a return, and that menſtruation has continued regular to a very advanced age. Theſe ſingularities, however, are to be conſidered as the effect of a diſ-

eaſed ſtate of the uterus, which is ſufficiently confirmed by this circumſtance, that ſuch patients were generally cut off by the hemorrhage at laſt.

XII. A lunar month was remarked (IX.) as the proper diſtance between the periods of the repetition of each diſcharge; but in this a very great variety prevails, both in the ſame climate, and alſo in different climates. Thus, in the ſame climate, ſome women menſtruate with the greateſt regularity every fortnight or three weeks, while others again have regularly no appearance of the diſcharge for an interval of two or three months. Theſe peculiarities, however, of habit, require to be accurately diſtinguiſhed from diſeaſe, and it is the effect alone of its retention on the ſyſtem we judge by.

In the warmer climates, again, menſtruation is common every fourteen days, or, at moſt, three weeks; nay, it is ſeldom abſent, though then it riſes in ſome meaſure to the height of diſeaſe.

In the very cold climates the reverſe takes place. In Lapland, it has been mentioned as only recurring twice, or at moſt thrice, in the courſe of the year.

XIII. The ſymptoms of the menſes are very fully deſcribed by authors, and admit a diviſion into thoſe that occur *previous* to their proper eſtabliſhment, and thoſe that mark them *after* their regular recurrence has taken place.

The former conſiſt of general ſymptoms of turgeſcence of the vaſcular ſyſtem.

The latter of irritation of particular organs, with which the uterus ſympathiſes from its diſtended ſtate.

XIV. The firſt we find manifeſted by,

1. General increaſe of circulation; the pulſe being fuller and quicker than what is uſual, previous to this period.

2. Particular ſymptoms of oppreſſion, and weight at the precordia.

3. General languor and inactivity, with welling and turgeſcence of the breaſts.

4. Accidental rupture of veſſels, or hemorrhages from different parts, giving a temporary relief to this ſtate.

XV. The ſecond ſet of ſymptoms, again, or the ſympathetic, conſiſt of uneaſineſs at ſtomach, pain of head, back, &c.

When the menſes are once fully eſtabliſhed, the conſtitutional ſymptoms of turgeſcence (XIV.) more rarely appear, or only in a ſlight degree, and each ſucceſſive return is rather diſtinguiſhed by the uterine ſymptoms themſelves, as pain, tenſion, and laſſitude of the hypogaſtric region, with ſlight diſturbance in the functions of ſome of the ſympathiſing parts, particularly the ſtomach and head.

XVI. From this ſhort examination of the hiſtory and ſymptoms of the menſtrual diſcharge (from VIII. to XV.), it is proper we ſhould next attempt to deduce ſome view of its cauſe.

In order to explain this, it is neceſſary we ſhould recur to our former poſition, that the *leading characteriſtic of the female habit* is a laxity of ſolid; and that this laxity requires to be *ſtudiouſly preſerved* by nature, through the greater part of life, as eſſential to the execution of that ſeparate office which the ſex is particularly deſtined to perform; that this is the effect of the menſtrual diſcharge, in a principal manner, will appear when we conſider the circumſtances which mark the age of puberty in the male.

XVII. The growth of the body is obſerved to depend on the extenſion of the vaſcular ſyſtem with a correſponding appoſition of new matter. The manner of this extenſion is determined by certain laws, which occaſion particular parts to acquire firſt their complete ſize, before others are enlarged in the ſame degree; but the progreſs of extenſion, or the growth of any part, is always in proportion to the laxity of ſolid, or ſuperior force of the heart, compared with that of the vaſcular ſyſtem. Hence we find in infancy, while the ſolid is lax and yielding, the extenſion is moſt rapid; and gradually, in the progreſs to puberty, the facility of extenſion diminiſhes, till at laſt a balance, between the force of the heart and reſiſtance of the vaſcular ſyſtem, oppoſing the further elongation of the latter, is induced.

As the powers of nutrition remain equally ſtrong, the effect of this reſiſtance to growth muſt ſoon be an exceſs of fluids or plethoric ſtate, affecting the general circulation; which ſtate is removed, partly by the evolution of glands, whoſe functions were formerly

incomplete, forming a new ſecretion, and partly by an increaſe of the different excretions in conſequence of an increaſed rigidity of ſolid, the effect of the more powerful exertions of the heart, to accompliſh a further extenſion of the vaſcular ſyſtem.

But in the female no ſecretion is intended to take place, while, at the ſame time, the rigidity of ſolid induced by the increaſed action of the heart at this period is unfavourable to the *continuance* of that habit remarked to characteriſe the ſex. Hence, to prevent it, as from the circumſtances of growth, a plethoric ſtate muſt neceſſarily enſue; and in order to diſtinguiſh the ſex, of which, before this period, there is *little* diſtinction, a diſcharge we find take place from the general circulation itſelf, which is profuſe in proportion to its frequency, and which at once affects the action of the heart, and conſequently the ſtate of the vaſcular ſyſtem, as not being altered by any ſecretion.

XVII. From this circumſtance, the age of puberty, which gives to the male an increaſe of vigour and tenſion of ſolid, communicates, on the contrary, to the female a ſenſible weakneſs and laxity not felt before, producing, in the whole ſyſtem, that ſtate which in future is to diſtinguiſh the ſex.

XVIII. The ſituation from which we mentioned this diſcharge to appear was the uterus; and we find its appearance here originally favoured,

1. By the circulation to the organ; and,
2. By the ſtructure of the organ itſelf.

XIX. With reſpect to the former, it is obſerved,

1. That the defcending aorta is larger in women than the afcending; the reverfe of which is conſpicuous in the male, and ſhows that an increaſed determination is here intended.

2. It lays aſide, in ſome meaſure, its natural firmneſs and denſity, before it divides, ſo as to be more affected by the action of the heart in this ſituation.

3. The veins are ſmall in the inverſe proportion to the arteries, and poſſeſs an increaſed denſity, retarding the flow into them from the arteries, thus favouring accumulation in the organ, where a plethoric ſtate of the general ſyſtem prevails.

XIX. With regard to the ſtructure of the organ, it conſiſts entirely of a *parenchymatous* ſubſtance, which readily admits diſtenſion, and may be conſidered as ſomewhat between muſcular and cellular matter, receiving, by extenſion, the nature of the former. The diſtenſion of ſuch matter is not attended with thoſe conſequences which diſtinguiſh it in the other organs; for where diſtenſion of them occurs, inflammation is liable to enſue. In the uterus, however, this never happens; even in the liver, which is of a ſimilar ſtructure, inflammation is not very frequent, compared with the other organs, and difficult to detect, in conſequence of its little ſenſibility, whatever authors may aſſert.

Hence, theſe two circumſtances of its ſtructure, and little ſenſibility, favour that accumulation which the ſtate of its circulation naturally induces.

XX. Having thus explained the cauſes that pre diſpoſe

to its occurrence, and the neceſſity for the diſcharge, it remains next to account for the real appearance of the diſcharge itſelf.

From the diſtenſion of the uterus, mentioned (XVI.), we ſuppoſe that the ovaria, as being *highly* irritable, and ſympathiſing in a peculiar manner with the uterus, are excited in a certain degree by its diſtended ſtate; which excitement communicating to the ſpermatics, and the other vaſcular branches diſtributed in a particular manner upon their ſubſtance, an increaſed ſtimulus augments their action to that degree, that a rupture of their extremities occurs where connected with the veins, and where the reſiſtance to their circulation is greateſt, taking off the *general* as well as *partial* plethora of the ſyſtem.

XXI. That this irritable ſtate of the ovaria much influences the appearance of the menſes we have reaſon to conclude;

1. Becauſe the ovaria at this period ſhow a different appearance from what is conſpicuous before, and a fullneſs of their contents.

2. Becauſe the ſpermatic arteries, have a particular diſtribution on the ovaria, which can anſwer no other purpoſe than to increaſe any irritation conveyed to theſe parts.

3. From the ovaria being obſerved to be of a very ſmall ſize in caſes of chloroſis.

4. From theſe parts ſuffering more than any others of the genital ſyſtem, on the decline of life, when the menſes begin to depart, loſing their uſual ſize, and becoming conſiderably ſhrivelled.

5. From menſtruation becoming irregular where they happen to be diſeaſed ; and,

6. From analogy in the male, in whom a certain ſtate of the genital ſyſtem is neceſſary to give tenſion and tone to the whole body, and hence, from the ſimilarity ſubſiſting between the teſtes and ovaria in their functions, where the menſes do not appear, as a general flaccidity prevails in the female ; ſo we conceive ſuch a ſtate in the ovaria neceſſary to the appearance of the menſes, as on the uſual commencement of this diſcharge no ſuch flaccidity is ever diſcovered.

XXII. The menſtrual blood we conſider as flowing from the arterial ſyſtem; for during youth and middle age, when the menſes only flow, the denſity of the venous coats exceeds that of the arteries ; conſequently a greater reſiſtance is formed to the tranſmiſſion of the blood into the former. Hence, the accumulation at this period muſt chiefly prevail in the latter; and from their contractile power, increaſing their natural reſiſtance, a rupture of the arterial extremities, where connecting with the veins, will of courſe occur. This is alſo proved by its greater conſiſtency with the uſual laws of the circulation, and from the nature of the blood itſelf, which diſcovers the ſame florid appearance as when flowing from the arteries.

XXIII. In this manner we account for the firſt appearance of the menſtrual diſcharge. But though neceſſary for its *firſt* appearance, and till once properly eſtabliſhed, this general ſtate of the ſyſtem is no *longer* required for its ſubſequent returns. For as we have obſerved the veſſels to be here more favourable

for accumulation than in any other part, ſo the diſtenſion of them in the ſame degree with thoſe of the reſt in the body, to produce only a ballance of them with the other parts of the ſyſtem, by giving a certain irritation to the ovaria, which we conſider in their natural ſtate as highly ſenſible, and the latter exciting in their turn, their contraction eaſily produces from their ruptured extremities the ſame evacuation as *formerly* took place; although, at the ſame time, this degree of irritation on the ovaria is much inferior to what the general plethoric ſtate, formerly mentioned, induced.

XXIV. That this is the cauſe, and that, when *once* eſtabliſhed, the ſucceeding returns of this diſcharge are *not* influenced by the general plethoric ſtate, which at firſt occured, we poſſeſs the cleareſt evidence.

1. By its not ſtopping in circumſtances of the moſt debilitated ſituation, where a general plethora can have no exiſtence; and hence it cannot, as many authors allege, depend on the quantity and quality of the nouriſhment taken in; nor yet on the degree of inſenſible perſpiration, as being moſt abundant in a warm climate, where ſuch inſenſible perſpiration is greateſt.

2. By its not being ſuppreſt by remedies removing general plethora, particularly blood-letting.

3. By its being promoted by ſtimuli applied to the uterus, exciting the ſtate of the ovaria, as frequent coition.

4. By its occurrence in greateſt quantity in thoſe who are moſt relaxed; the ſenſibility of the ovaria being in them greateſt; and the leſs diſtenſion, there-

fore, producing the irritation neceſſary to the diſcharge.

XXV. Having endeavoured, then, to deduce ſome opinion of the nature and cauſes of the menſtrual diſcharge, it is proper we ſhould review the moſt remarkable theories which have been delivered at different periods, with a view to explain the ſubject. The *firſt theory* is, that which referred its appearance to the influence of the moon. The regularity of its appearance in the ſame ſubject, and the diſtance of its periods in the greater number of women, particularly in that climate where this theory was firſt delivered, ſtrongly favoured ſuch an opinion, which, in modern times, has been very ably ſupported by Dr. MEAD. But, in ſpite of what he has offered in its favour, it appears from the hiſtory of menſtruation delivered, that women ſuffer this evacuation at all different times, without any particular regard to the ſtate of the moon; and that the periods of repetition, in different women, by no means obſerve ſuch a regularity as muſt neceſſarily take place, did they proceed from this cauſe.

XXVI. The *ſecond theory* is that which referred its origin to a particular action of the fluids of the uterus, under the idea of fermentation, by which they came to be partly ruptured, and to pour forth their contents at ſtated periods. This was a term applied to explain almoſt every change in the animal body, while the chemical theory of medicine prevailed: but from its effects in chemiſtry we obſerve, that fermentation is a proceſs which, if occurring in the human

body, would be always attended with morbid conſequences, and extend its influence conſtantly through the ſyſtem, even all the time it was forming, as well as during the period of the flow; that it is a ſymptom of health, not of diſeaſe; and ſuch a term, therefore, cannot apply to both ſtates, as took place in the chemical theory.

2. The regularity of its occurrence in the ſame ſubject oppoſes this idea: and,

3. The vital principle in the animal body counteracts all proceſſes of inanimate matter, and ſubjects the ſyſtem to peculiar laws; ſo that ſuch a proceſs could only take place after it was poured into the uterus.

XXVII. *Another*, and a more ingenious opinion, of the origin of the menſes, is that which referred it to a *peculiar ſecretion* in the uterus, which, giving an increaſed activity to its veſſels, produced the diſcharge. In this they were confirmed by what happens in animals, which, at particular times, when deſirous of venery, ſhow a ſtate of the uterus ſimilar to what occurs under menſtruation.

But, in the firſt place, we would obſerve, that there is no proof of any ſuch ſecretion taking place, neither does the argument from analogy hold here; for women we find not more deſirous of venery at the period of menſtruation than at any other time; on the contrary, the embraces of the huſband are more carefully avoided; conſequently, no ſtate ſimilar to that in the brute creation can exiſt.

XXVIII. The fourth, and moſt univerſal theory, however, is that which viewed this peculiarity of the female habit as ariſing from a general plethora.

It has been ſupported by many writers of the firſt reputation; and, on this account, we ſhall beg leave to conſider it with ſome attention.

The firſt argument advanced in ſupport of this opinion is——

1. That the more relaxed conſtitution of women, by communicating leſs power or force to the circulation, occaſions the different ſecretions to be leſs actively performed.

2. That their ſedentary life poſſeſſes the ſame effect, and even increaſes that natural ſtate of habit.

3. That the robuſt, and ſuch as approach nearer in their conſtitution to the male, are irregular in their menſtruation.

4. The power of nutrition remaining equally ſtrong, while the rapidity of growth at the age of puberty diminiſhes, a tendency to general plethora muſt neceſſarily be produced: and,

5. That ſuch plethora actually takes place, is confirmed by a ſpontaneous hemorrhage, at the age of puberty, without any flow from the uterus itſelf, relieving for a time the morbid ſymptoms which then appear.

XXIX. That ſuch a general plethora is then conſpicuous, we have already endeavoured to ſupport; but it is equally true, for the reaſons alſo formerly aſſigned, that, when once eſtabliſhed, it cannot influence at all times its ſubſequent returns. This ſoon appeared to many authors; and deſerting, therefore, the

theory of a general plethora, which, we ſtill contend, at firſt prevails, they endeavoured to account for it by the ſame ſtate confined ſolely to the uterus itſelf. This they attempted to ſupport in two ways; either,

1. By a particular ſtructure of the veſſels of the organ; or,

2. Certain circumſtances of its circulation, without this.

The firſt was the favourite theory of Dr. ASTRUC, who has taken very great pains in deſcribing this peculiarity of ſtructure; but his deſcriptions have never been confirmed by the diſſections of any future anatomiſts, and are to be conſidered as merely ideal, and formed to explain a difficulty he could not otherwiſe overcome.

The ſecond again, or the circumſtances affecting the circulation of this organ in a peculiar manner, are:

1. The tendency to accumulation, which the veſſels in the neighbourhood of the uterus, from their ſtructure formerly deſcribed, poſſeſs.

2. The want of valves, which the uterine veins diſcover, and the ſlow motion by which their fluids muſt, therefore, be particularly diſtinguiſhed.

3. The ſituation of the organ itſelf, or its dependent ſtate; and,

4. Its analogy with the other part of the body, particularly the breaſts, where *a local plethora* at times evidently appears. For theſe reaſons, then, a local plethora muſt be admitted as taking place: but, from analogy with thoſe hemorrhages, which occur in other parts of the body, ſome added cauſes are neceſſary to produce at firſt the diſcharge; beſides, the ſimple accumulation in the organ

itſelf, and a general plethora, at leaſt a degree of increaſed action of the ſyſtem, muſt be likewiſe introduced, to account for many of the phenomena which characteriſe the firſt periods of its appearance.

XXX. The nature of the menſtrual blood was formerly ſuppoſed different from the reſt of the general maſs, and as conveying alſo ſomething morbid from the ſyſtem. This aroſe from the theory of morbific matter; and was farther confirmed by the apparent ſymptoms attending its retention. It was on this account the diſcharge was formerly named by authors, the *menſtrual purgation*, a term even uſed ſo lately as by Dr. HALLER. This opinion has been ſomewhat revived, though on a different principle, by the late Dr. HUNTER, under the idea of its being a bloody ſecretion, not common blood. The motion of the blood, indeed, in the veſſels of the uterus, from their minuteneſs in their natural ſtate, muſt be very ſlow: hence their contents will poſſeſs, on evacuation, a great quantity of coagulable lymph, which is confirmed by the menſes being frequently voided by many women in the form of clots. The blood alſo, when poured from the uterine veſſels, is certainly in an extravaſated ſtate, and is then expoſed to the different changes which heat and retention may produce. This they were very early ſenſible of in the warmer climates; hence the ſevere injunctions, and thoſe other reſtrictions recommended ſo ſtrongly by the Levitical law: ſuch regulations ſtill prevail in moſt of the warmer countries; — experience muſt have early pointed out the neceſſity for them. It is likewiſe the more proper, as diſeaſes of the menſes, or a morbid ſtate of

the diſcharge, is more liable to occur in thoſe ſituations, and particularly the fluor albus, from which a gonorrhœa ſpuria often ariſes.

XXXI. The menſtrual blood we formerly remarked as flowing from the uterus, and generally its fundus. This, however, is not always the caſe; and diſſections have ſhown ſome variety to occur in particular inſtances. This variety it is proper alſo to be acquainted with; for where the veſſels of the uterus poſſeſs any unuſual firmneſs of texture, as the circulation of all theſe parts has a connection by the anaſtamoſis of their veſſels, the rupture of the latter may occur in the vagina, and the diſcharge flow from this ſource; a circumſtance which has been at times remarked: but that it flows moſt commonly from the uterus, is confirmed by obſervation in caſes of prolapſus, as well as by diſſections; and that it proceeds alſo from its fundus we have a farther proof by this part in geſtation, forming, generally, the place of attachment of the placenta.

XXXII. In the quantity of the diſcharge at each period, a great variety was formerly obſerved to prevail; and the only way of aſcertaining the exact quantity voided at a time is by examining the cloths applied to receive it. When, however, it flows at firſt in a conſiderable ſtream, as the blood poſſeſſes then a leſs proportion of coagulable lymph, it will ſtain a greater number of cloths than where it flows ſlowly and imperceptibly, and acquires an additional firmneſs by the diſſipation of its thinner parts from retention. Hence we cannot abſolutely decide on this proof of its quantity, commonly advanced by authors.

XXXIII. The natural interruption, alſo, of this diſcharge we mentioned as only taking place during geſtation, and the period of nurſing. In ſome inſtances, however, as we ſhall afterwards find, it appears for two or three periods after conception; but this is ſo rare, that it no way controverts the general opinion, and is to be conſidered in ſuch inſtances as a deviation entirely from the natural courſe. It perhaps only occurs in thoſe in whom the diſcharge is uſually from the veſſels of the vagina, which are not ſo ſoon affected by conception. In the ſame way menſtruation has been known to continue regular during the whole period of nurſing; but ſuch caſes deſerve to be marked merely as uncommon occurrences, and as ſhowing the variety of nature in the formation of the conſtitution. It is generally, however, ten or twelve months after child-bed before the menſes return; and where nurſing does not take place, it is at leaſt ſix weeks, or three months.

Nay, it has been known, though this is ſtill more rare, that ſome women have never at any time during their life ſuffered menſtruation. In theſe, however, the uterus on diſſection has been found wanting.

XXXIV. Women themſelves conſider the period of menſtruation, in ſome meaſure, as a ſtate of diſeaſe; and hence they are minutely attentive to every circumſtance regarding their health at this time. Their natural irritability is certainly then increaſed, and their opinion may have an effect in rendering it more ſo. It is neceſſary to humour thoſe prejudices. You cannot indeed, with propriety, combat what is early inſtilled both by the mother and every female attendant.

Theſe prejudices have occaſioned certain aliments being particularly rejected at this time, as fiſh and milk, which are the moſt noted. Some delicate ſtomachs, indeed, cannot bear the uſe of theſe ſubſtances at any time; and, from their particularly diſagreeing during menſtruation, they have been conſidered by the ſex in general as improper at this period.

The proper rule, however, in this caſe is, that whatever diſagrees at any other time ſhould be then carefully avoided; and where fiſh and milk do not diſagree, there is properly no neceſſity for their excluſion.

XXXV. We have thus offered our opinion of the menſes; and in concluſion we obſerve, that, independent of the local effects of the diſcharge, it is neceſſary to preſerve the *characteriſtics* of the female; and that its flowing prevents the occurrence of that ſtate of conſtitution which diſtinguiſhes the male.

XXXVI. That this ſtate of the uterus it induces, as well as that of the general conſtitution, is neceſſary to conception, is proved from the following circumſtances:

1. Previous to the age of puberty, and when the menſes have entirely ceaſed, conception is never found to take place.

2. Sparing menſtruation is always attended with difficult conception: and,

3. Something ſimilar to the menſes, conſiſting in a ſerous excretion, or the appearance of a few drops of blood, occurs in all animals, when deſirous of coition: and it is obſerved, in many animals, that when they come

to be in ſeaſon, particularly Does, the uterus becomes ſoft, lax, and fleſhy.

Theſe, then, are the ſeveral circumſtances (from V. to XXX.) that we judge eſſential to the ſucceſs of conception, and from a previous knowledge of which, the nature of this phenomenon, with its effects on the uterus, we are now prepared to inquire into.

XXXVII. From the venereal appetite, or deſire of coition, natural to every animal, we ſuppoſe, that, ſimilar to the diſtenſion of the *corpora ſpongioſa urethræ* in the male, a *certain turgeſcence* of the female parts, and particularly of the uterus, previous to this act, occurs. By this turgeſcence, a peculiar ſtate of excitement, favouring abſorption, is induced; and the Fallopian tubes, in conſequence of this ſtate, appear to have their ragged fimbriæ, or abſorbing extremities, erected; and on the admiſſion of the male ſemen into the uterus by coition, a portion of it entering their cavity is carried through its whole extent to the fimbriæ; and by this increaſed ſtimulus of the fluid, theſe fimbriæ come next to be applied round the ovaria which they are naturally meant, by their action, to embrace. In this ſituation, what they contain is ſhed on theſe bodies, which are conſidered to be of a peculiar glandular ſtructure, poſſeſſing a number of ſmall veſicles, or ova, in their ſubſtance. One or more of theſe ova, receiving, by this application of the fimbriæ, a particular change, burſt the tegaments which incloſe them, and are then carried by the fimbriæ, through the Fallopian tubes, into the uterus. This retrograde motion is particularly favoured by that debility or collapſe which

ſucceeds the excitement in coition; for, according to the experiments of Mr. DARWIN, the retrograde motion of veſſels is chiefly owing to debility.

XXXVIII. To render this theory the moſt probable on the ſubject of generation, the following circumſtances advanced require to be eſtabliſhed as matters of fact.

1. The excited ſtate of the female organs previous to coition.

2. The preſence of the ſeminal fluid in the uterus and Fallopian tubes.

3. The action of the tubes themſelves.

4. The exiſtence of the ova in the ovaria.

5. The deſcent of the ova into the uterus.

XXXIX. With reſpect to the firſt, ſuch a ſtate is obſervable in all animals; and in ſome, as in the cat, it riſes to the height of actual inflammation. In others, the diſtillation of a white fluid from the vagina, in conſiderable quantity, marking the ſame ſtate of the parts, is very conſpicuous.

XL. In regard to the ſecond circumſtance, or the preſence of the ſeminal fluid in the uterus, the facts which ſupport it are numerous; for,

1. Both RUYSCH and CHESELDEN found its cavity, ſoon after coition, not only filled with ſemen, but likewiſe the Fallopian tubes themſelves;—a proof, at the ſame time, of their abſorbent power.

2. The penis in coition is often ſenſibly felt to touch the orifice of the uterus; and, in ſome animals, it is of ſuch a length, as to ſhow it evidently intended for this purpoſe.

3. From the farther experiments of Spallanzani, it appears that the aura ſeminalis is not ſufficient for animation; but that the ſemen itſelf muſt be applied to the ovum. Hence the common obſervation ſeems well founded, that, in a ſucceſsful embrace, the ſemen is retained, while in the reverſe it flows immediately from the vagina.

XLI. To confirm the third circumſtance, or the abſorbent action of the tubes, we obſerve,

That there are ſeveral inſtances of aſcites being cured by the water being taken up from the abdomen in this way: and that this abſorbent power is exerted for the deſcent of the ovum we farther eſtabliſh,

1. By diſſections which have ſhewn the fimbriæ of the tubes applied to the ovaria, after coition, and even coaleſced there in other caſes from a morbid ſtate.

2. From obſtruction of theſe tubes having been found a frequent cauſe of ſterility.

3. From fœtus having been found in the courſe of the tubes ſtopt in their deſcent into the uterus, by ſome cauſe, and increaſing there;—and alſo from fœtus being found in the abdomen itſelf.

XLII. The fourth circumſtance needs only the proof of diſſection; for on cutting open the ovaria we find ſuch ova manifeſtly exiſt in every female, though varying in their number.

XLIII. The laſt circumſtance, and the moſt important, will be found equally clear from the following facts;

1. On cutting out the ovaria in animals, barrenneſs enſues.

2. The uterus in many animals is wanting; but in none that procreate are the ovaria wanting, or ſomething of a ſimilar nature anſwering the ſame purpoſe.

3. Fœtus have been actually found in the ovaria in ſeveral inſtances.

4. In all pregnant women, on diſſection, a particular cicatrix or ſcar, having a hollow or vacuity within, termed from its appearance in the quadruped, corpus luteum, and anſwering to the place of one of theſe ovaria is obſervable.

5. From analogy in fowls, in which the ſame kind of ſtructure prevails, and where the deſcent of the ova into the uterus is well aſcertained.

XLIV. From the ovum, then, conveyed in this manner (XLI. XLV.) into the uterus, and the ſtate of the latter deſcribed, increaſed by the preſence of the ſeminal fluid, conception we ſuppoſe to ariſe: and, with the ſame probability, we proceed next to trace the ſeveral appearances which ſucceed it.

Progreſs of the Uterine Contents.

XLV. From the retention of the ſemen in the uterus, it muſt neceſſarily act, while there, in two ways:

1. As already detailed, in giving animation to the ovum: and,

2. Which we are now to conſider more particularly, as a peculiar ſtimulus, or organiſing balſam, producing that ſtate of uterine ſurface neceſſary to form and evolve the connecting parts or appendages of the future production. For the retention of this fluid, as

inſiſted on, it is clear, like every other cauſe of irritation, muſt be to ſtimulate the ſurface to which it is applied: and as the uterus, like every other cavity, is furniſhed plentifully with exhalants, ſo this irritation on its internal ſurface, the ovum being yet too ſmall for ſuch an effect, muſt produce an excretion, which, like that from all inflamed ſurfaces, or ſurface in a ſimilar ſtate, poſſeſſes a tendency to connect parts, and forms into a membranous expanſion for this purpoſe. This membranous expanſion, from the peculiar direction it afterwards takes, as deſcribed by Dr. HUNTER, in its progreſs to connect the uterus and ovum, has received from him the names of decidua, and decidua reflexa; and, before his time, from RUYSCH, the term of tunica filamentoſa. It conſtitutes, in early geſtation, the greater part of the maſs which forms an abortion; a proof that both the uterine excretion taking place is conſiderable, and that the ſemen continues to act as a powerful irritating cauſe.

XLVI. That the effect of the ſemen is really to produce this uterine inflammation, or a ſtate ſimilar to inflammation, we prove by the firſt appearances of conception, which can be traced by diſſection: for the cavity of the uterus, on being opened a few days after conception, appears filled with a viſcid glairy mucus, on removing which the ſurface below ſhows red and inflamed. This was particulary remarked by Dr. HARVEY in the uteri of Does, who may be conſidered as the firſt author of eminence who made experiments on this ſubject; and this appearance was regarded by him as the firſt ſign of conception.

XLVII. From this view, then, the contents of the

gravid uterus come to be properly divided into two parts, a maternal and fœtal. The former connects the ovum to the uterus, as already deſcribed; for till then the ovum may be conſidered as an extraneous ſubſtance in its cavity. This part, however, can only be aſcertained as a maternal one in the early months; for by the expanſion of the ovum, it comes at laſt towards the term of geſtation to be entirely loſt in the fœtal membranes, and the only part of it we then aſcertain to be maternal is that portion which forms part of the placenta, and which can only be injected from the uterus, not from the fœtus*.

XLVIII. At firſt, then, this maternal part is the moſt conſiderable; and, for ſome time, the veſicle or ovum ſhows little change, which is proved by the appearance of abortions at this period. On removing the anterior portion of the fleſhy bag they form at their expulſion, a ſmall veſicle *only* is conſpicuous. From this veſicle, when opened, a gelatinous fluid flows out, followed by a ſmall white ſpeck, which is the fœtus. From the fluid, at this period gelatinous, it derives its nouriſhment, and has its parts gradually evolved, when the umbilical veſſels appear. They continue ſhooting out till they reach the ſurface of the membranes to which they form adheſions; for we find them inſerted at different parts of the cake. So ſoon as the umbilical veſſels

* This is particularly proved by caſes of extra-uterine conception in the abdomen, where the placenta wanting the maternal part was found in the form of a *thin membranous ſubſtance*. A remarkable caſe of this kind is publiſhed by Mr. W. TURNBULL, Surgeon in London, detailed with much accuracy, and which contains references to all the caſes of extra-uterine conception related by authors.

are once attached to the placenta, a conſiderable change enſues. The fluids are then tranſmitted to the fœtus by the umbilical veſſels alone. They conſiſt of two arteries and a vein; and while the latter conveys the fluid into the ſyſtem of the fœtus, it is returned by the former, after pervading its circulation, back into the placenta, where, by the exhalants of the latter, the uſeleſs or feculent part is diſcharged, and mixes with the fluids contained within the coats of the bag or veſicle. This is evident from theſe fluids loſing then their former gelatinous nature, and acquiring an excrementitious ſtate, which gradually increaſes as geſtation advances. At firſt, alſo, as little is neceſſary to the circulation of the fœtus, ſo the waters we find in greateſt quantity in the early months leſſening progreſſively, as the fœtus requires the whole of the blood entering the placenta for its nouriſhment.

XLIX. The period when this change in the ſtate of the fœtus, by the adheſion of the umbilical veſſels, commences, is about the end of the ſecond month; for till then, as obſerved by Sir R. MANNINGHAM, no appearance of umbilical cord can be traced; neither is there any regular appearance of placenta, the ſurface of the ovum being all alike. Soon after this period alſo, when the adheſion of the cord is obſerved, there appears near its extremity a particular veſicle, or bag, containing a whitiſh liquor; termed, therefore, by authors, the veſicula alba, having a duct leading into it, and performing a peculiar ſecretion, the uſe of which is unknown; for becoming gradually leſs tranſparent, it departs ſo ſoon as the cord acquires any ſize.

L. The cord thus connected (XLVIII.) we have obſerved to vary in the place of its attachment; but ſpreading out upon the ſurface of the membranes, it appears to ſhoot out its extremities deep into their ſubſtance, which, anaſtomiſing with thoſe of the placenta, a communication betwixt the uterus and fœtus comes thus to be formed.

LI. The manner in which this communication takes place has been often diſputed; and anatomy has been called in, on both ſides, to decide the queſtion. From the circumſtance already obſerved, of the umbilical veſſels not being connected to the uterus at firſt, till ſome evolution of the parts of the ovum takes place, theſe veſſels will naturally, in their progreſs towards this connection, ſhoot out into ſmall diviſions, which being incapable, in this minute ſtate, of penetrating the firm ſubſtance of the uterus, muſt anaſtomoſe merely with thoſe of the maternal part of the placenta; and by this means a direct, though minute communication betwixt the uterus and umbilical veſſels, comes to be formed,

LII. In proof that ſuch a direct communication, in whatever way it may be formed, actually exiſts, it is obſerved,

1. That injections of a very penetrating nature have been actually made to paſs from the ſyſtem of the uterus into the umbilical veſſels.

2. It is a fact agreed by all authors, that injections paſs a certain way from the uterus into the placenta, or fill its ſpongy part.

3. On the death of the child, at any period during pregnancy, a flooding for the moſt part occurs. This can only proceed from the circulation, on ceaſing in the fœtus, producing an over diſtenſion of theſe ſmall veſſels; when a rupture of their very tender coats, and a conſequent ſeparation, muſt enſue.

4. The argument commonly advanced, of a want of hæmorrhage from the cord, on its diviſion after delivery, except of what blood is contained in the placenta itſelf, affords no concluſion; for from the firſt moment of contraction in the uterus, the connection betwixt it and the placenta, as formed by minute veſſels, is generally deſtroyed; but the body of the child filling up the uterus, and the latter contracting regularly, no hæmorrhage enſues. Where, however, any irregularity in this contraction occurs, a flooding in the courſe of labour neceſſarily comes on, which we find in practice frequently the caſe. Theſe floodings alſo are moſt common towards the end of tedious caſes, where an atony of the uterus in particular parts, and thus an irregularity of contraction has probably been induced. For, as a ſtill more convincing proof that the *leaſt* contraction produces this ſeparation where the placenta has been improperly attached, depending from what we have advanced on the particular ſituation of the veſſels, whence the menſtrual flow had proceeded a hæmorrhage to a degree often fatal, enſues. From theſe facts, then, we conclude, that if the cord could be cut before the commencement of labour, a hæmorrhage from the uterus would flow from its extremity in a continued ſtream, and mark ſuch a direct communication as inſiſted on.

5. In caſes of morbid adheſion of the placenta, a direct anaſtomoſis muſt undoubtedly take place; which,

if taking place at any time, muſt prevail always, though in a leſs degree.

6. As the fœtus is very ſmall at firſt, and the placenta, on the contrary, very large, it is clear the fœtus cannot form the red blood in the placentary maſs; and as it muſt be drawn from the mother, if it took place by abſorption, it ſhould be altered as any other ſecreted fluid, and not be the ſame; but we find, on examination, that it is exactly the ſame.

7. No hæmorrhage enſues from the cotyledons of animals, after delivery, as happens from the human uterus when the placenta is removed. The analogy, therefore, between them, does not hold, and forms a ſtrong proof againſt abſorption in the human ſubject.

LIII. In this manner, then, with much probability, we judge the contents of the gravid uterus to be formed; and the progreſs of the diſtenſion of the veſicle, or ovum, comes next to engage our attention.

LIV. This diſtenſion at firſt (while the fœtus is in its incipient ſtate), is entirely performed by the waters. Theſe we have obſerved to ariſe from an exhalant excretion; but how this ariſes it is difficult to explain. We obſerve, however, that wherever red veſſels are to be found, that branches of a more minute diviſion, or an exhalant nature, always attend; and ſince exhalation is in proportion to the inhalation taking place, ſo the connection between the uterus and placenta being ſoon formed, and thus a quantity of blood tranſmitted to the latter, while the fœtus has yet no attachment to it, we ſuppoſe that, in order to allow the circulation to proceed between the uterus and placenta, this fluid collected muſt be diſcharged. The thinner parts of it,

therefore, we conſider as poured into the cavity of the veſicle, or ovum, which diſtend it. But, on a communication between the fœtus and placenta, by the adheſion of the umbilical veſſels taking place (XLVI. XLVII.) and that the fluid of the placenta paſſes directly into the circulation of the fœtus (XLIX.), as exhalation, or the excretion from minute veſſels, depends much on the ſlowneſs of the action in the larger, ſo this ſlowneſs, or ſtagnation in the placenta, being leſſened, the excretion will neceſſarily come to be diminiſhed; though for a conſiderable time only in a very ſmall degree, and tranſmit only the more purely ſerous part.

Hence we find the waters at firſt of a gelatinous conſiſtence; next, more of a ſerous nature; and, at laſt, entirely excrementitious, poſſeſſing, indeed, often a tendency to putrefaction; while, at the ſame time, they are in larger quantity in the early months, and gradually decreaſe till the end of geſtation.

LV. Theſe exhalants of the placenta have never yet been traced; and the ſame may be applied to other parts of the body, where, from diſeaſe, they appear evidently to exiſt. Thus they have never been diſtinctly obſerved in the brain; though collections of a ſerous nature, entirely reſembling the waters, and that to a prodigious quantity, very often occur.

LVI. That the origin of theſe waters is not from the membranes in their continuation, or at leaſt not in a principal manner, is proved, becauſe the more the latter are extended, the greater ſhould be their quantity which we find, on the contrary, the reverſe and the

ſame argument may be applied, ſuppoſing them an excrementitious exſudation from the ſkin of the fœtus; for in proportion to its ſize in the latter months, ſhould the quantity of this exſudation be increaſed.

LVII. From this conſideration, then, of the waters diſtending the uterine cavity, and retaining it in that ſtate, the fœtus is to be conſidered merely as a paſſive ſubſtance. At firſt, it appears in the form of a ſmall tadpole, floating in the little veſicle or ovum; and at about three months, we find it begin to aſſume ſomething of a diſtinct form; the umbilical cord, with the veſſels, being connected to the placenta, and each of the extremities appearing only as a ſmall ſpeck. Between the fourth and fifth months, however, moſt of the parts we find pretty complete; and ſoon after this its motion comes to be readily felt by the mother. From this period its increaſe is rapid; and at ſix months, it increaſes between eight and nine inches; from which, to the time of geſtation, progreſſively increaſing, its length is from eighteen to twenty-one.

LVIII. Having thus explained the changes which the contents of the uterus ſuffer, till the period of delivery, the changes of the organ itſelf correſponding to theſe we ſhall next attempt to inveſtigate.

Changes of the Uterus.

LIX. As a certain ſtate of the ovaria, then, we have conſidered as much influencing the appearance of the menſes (XII.), ſo a particular change in this ſtate, ariſing from the acceſs of the ſeminal fluid, we are much inclined to believe as affecting the diſtenſion of this organ in its gravid ſtate.

LX. That ſuch an influence of the ovaria on the uterus is well founded, we have reaſon to conclude,

1. By caſes of extra-uterine conception, where, though the fœtus was not contained in the uterus, yet its diſtenſion, as uſual, took place to ſuch a degree, as, in conſequence of the enlargement of its veſſels, to occaſion the ſame profuſe and often fatal hæmorrhages, as in common caſes, where ſuch accidents occur in the advanced months of geſtation.

2. By the ſmall ſize of the ovum at firſt, and delicacy of its texture, compared with the ſubſtance of the uterus, againſt which it forms a reſiſtance

LXI. The changes, then, which the uterus receives, depending on this cauſe, we conceive to be,

1. An extenſion of its veſſels, in conſequence of diſtenſion; and,

2. An appoſition of new matter to its ſubſtance, the natural effect of its increaſed quantity of fluids. And as the uterus, even in infancy, ſhows a greater number of veſſels entering its compoſition than any other organ, being eaſily made entirely red by injection, ſo the facility of this extenſion will be much favoured.

LXII. From the ſtate of the uterus, mentioned as neceſſary to the occurrence of conception, this extenſion we judge to begin in that part where the veſſels are largeſt, and to which a determination chiefly prevails in the unimpregnated ſtate, from forming the ſource of the menſes. This we find to be its fundus: and from the latter conſtituting the far greater diviſion of this organ, the changes which happen in its increaſe are moſtly

confined to that part, for the greater period of geſtation.

LXIII. The firſt change obſervable in the fundus, from its particular ſhape, is found to be an increaſe of convexity, its corners loſing any acuteneſs they poſſeſs, and its ſurface becoming more extended. This increaſe naturally produces an alteration in the ſituation of the tubes and ovaria, by which they are placed lower, and conſequently more towards its centre. Such a change, however, is not ſenſibly apparent till near the fourth month. At this period the fundus begins to emerge from above the brim of the pelvis; previous to which, when its increaſe firſt takes place, as the ligaments, as well as the fundus itſelf, from their ſituation near the latter, and alſo from their connection with the veſſels which ſupply the uterus, by ſharing in proportion to their ſize in the ſame diſtenſion, receive, in ſome degree, an elongation of their fibres; ſo, in conſequence of this, the uterus of courſe deſcends lower into the vagina, and occaſions the contents of the abdomen, which it partly ſupports, to follow the ſame direction; thus producing a certain flatneſs of the belly, which gives one mark of conception.

LXIV. In ſupport of this opinion, that the deſcent of the uterus is not to be aſcribed, as ſuppoſed by authors, to the weight of its contents, we find that in caſes of prolapſus, where it is void of any contents at all, its deſcent happens to a much more conſiderable degree; and as we can ſee here no cauſe of diſeaſe to produce this relaxation of its ligaments, as occurs in prolapſus, we muſt, therefore, aſcribe it to a natural elongation of their fibres, the conſequence of concep-

tion; for it has been likewiſe obſerved, that when, from diſeaſe, as in caſe of ſchirrus, theſe ligaments were incapable of ſuch elongation, abortion ſoon enſued.

LXV. But on the emerging of the fundus above the brim of the pelvis, as obſerved (LX.), the direction of the ligaments (depending on that of the fundus) being altered, in proportion as the vagina was formerly ſhortened, it comes now from this period to be lengthened in the ſame degree, and to embrace more cloſely the os uteri. About the fifth month, aſcending in this direction, it gains half way between the pelvis and navel; when, on preſſure, its tumour can be felt inclining as it riſes from being looſely ſituated in the abdomen, and, therefore, wanting a ſupport a little to one ſide. At ſix months, it reaches the navel itſelf, which receives a protuberant appearance from being puſhed out by it; and from that period, to the term of geſtation, progreſſively augmenting, its increaſe is terminated by its preſſing againſt the ſcrobiculus cordis, or pit of the ſtomach.

In examining alſo the external appearance of the gravid uterus, we find it irregular in its ſurface, having projections here and there, from the members of the child puſhing out.

LVI. The exact height, however, which it attains, is different in different women; and much depends on the particular make of body, and the degree of ſpace in the abdomen, to allow its expanſion; for in tall women, in whom the abdominal cavity is more confined, it is naturally directed more upwards, which is the caſe,

likewise, in every fresh pregnancy, as the parietes of the abdomen form then greater resistance to its pulses, while, in short women, to whom the space is proportionally widened, it spreads more out as it advances, and presses a good deal to one side.

LXVII. In this manner, then, does the organic texture of the uterus gradually proceed in its growth and, till the term of delivery; and the manner in which its circulation is conducted, to effect this augmentation, deserves also to be attended to.

LXVIII. As during the period of life that child-bearing occurs, a plethora of the arterial system we have observed (X.) to prevail, and a greater resistance is made to the transmission of the fluids by the venous coats, so a stop being put to the passage of the usual evacuation from the arterial extremities, by a more firm adhesion of the uterine contents at that part whence the flow usually proceeds, a relief in them naturally takes place. This relieves exciting their contraction, is then propelled into the veins in greater quantity than usual: while, in consequence of their texture, a slower transmission of it, and of course a greater dilatation of their coats, must occur, and, at the same time, to favour an accumulation of their contents, and render their cavities more easily dilated, their trunks run all in a straight direction: but the arteries again observe, on the contrary, a tortuous course, in which their coats being more extended, their contraction is consequently quicker, and rendered like life more powerful; and an excessive accumulation of their contents, in proportion to that of the veins, thus prevented.

LXIX. The walls of the uterus being always larger

at that place whence the uſual diſcharge of the menſes proceeded, is found to continue ſtill the caſe when this organ is extended by gravidity; and, therefore, on opening the abdomen, from mere inſpection externally, the place of the placenta may be known.

LXX. From this view (LXV.) then, we conſider chiefly a venous plethora as the cauſe of the uterine diſtenſion; and all kinds of plethoræ of an active nature are to be referred to the arterial; thoſe of a paſſive to the venous ſyſtem. Hence moſt of theſe hæmorrhages of the early months ending in abortion, before the veins have acquired much ſize, are to be conſidered as ariſing from a rupture of ſome of the arterial extremities, and, therefore, of an active kind; while, on the contrary, thoſe of advanced geſtation, as depending on the tenſion of the venous coats, are to be conſidered as paſſive; and, as a proof, are chiefly to be got the better of by reſt and a horizontal poſture.

LXXI. Though this augmentation of the uterus, as deſcribed (LVIII, &c.), ariſes, for the moſt part, in the manner related, from the increaſe of its fluids (LXV.), yet ſome degree of addition to its ſolid parts we conceive alſo to take place; for, as in proportion to extenſion, the degree of preſſure from the diſtending power is increaſed, ſo this preſſure, we ſuppoſe, produces an appoſition of new matter; and this preſſure being greateſt internally, the veſſels, therefore, we find moſt apparent on its external parts.

LXXII. That an appoſition of new matter occurs, we believe,

1. Becauſe, wherever fluids are increaſed in any part to a conſiderable degree, the ſolids receive always, in-

dependent of their extenſion, ſome degree of addition.

2. Becauſe certain lamellæ are obſervable in the ſtructure of the gravid uterus, which are not to be found in its unimpregnated ſtate; and theſe lamellæ we conceive as giving it that particular ſpongy appearance, taken notice of by authors; but, on its contraction, they are rendered equally ſolid with the reſt of its ſubſtance.

3. Becauſe it never regains its original ſize; and this is neceſſary, as theſe lamellæ add ſomething to its ſolidity; and in order, therefore, to the regularity of future menſtruation (VII, &c.), it is requiſite its veſſels ſhould be ſomewhat more enlarged.

LXXIII. But the extenſion of the uterus does not take place, in every part of it, at the ſame period of time; this depends on the degree of laxity in its ſtructure, which varies in its different parts. Hence its ſubſtance, as being more lax at the fundus, we have obſerved, proceeds quickly in its ſtate of dilatation; till, in conſequence of its extenſion to a certain degree, a balance between the reſiſtance of its fibres, and thoſe of the cervix, naturally more rigid, is produced. Then the diſtenſion of the latter alſo commences. This is generally about the fourth month, and advances in proportion to the number of its veſſels admitting the increaſe of its fluids, in the ſame progreſs with the fundus. At the ſeventh month, about two-thirds of it are extended, and the remaining portion, being ſtill more rigid, requires for its accomplishment the full term of geſtation; when, from this increaſe of its ſize, it receives alſo a more rounded form, conſpicuous ever after, even in its contracted ſtate, and poſſeſſes leſs of that ellipſis, or tench-like appearance, remarkable during virginity.

BOOK I.

PREGNANCY.

I. WE have thus explained the ſeveral circumſtances (III. to XLIII.) on which we ſuppoſe conception to depend; and the ſeveral changes alſo, when taking place, it occaſions in that part of the ſyſtem to which it is more immediately confined (XLIV. to LXXIII). We ſhall next conſider the effects of theſe changes on the body at large, in the ſeveral diſorders that attend this ſtate, comprehending the firſt claſs of diſeaſes that form the ſubject of Midwifery.

II. Pregnancy may be defined a certain *inflammatory* diſpoſition of body, or *nearly* approaching to it; attended with an *increaſed frequency of the pulſe*, and *other febrile ſymptoms*.

III. That ſuch a diſpoſition prevails, we endeavour to prove:

1. From the ſizy appearance of the blood drawn, which diſcovers, at this time, the *buff coat*, or ſeparation of gluten on its ſurface, ſimilar to that appearing in caſes of inflammatory diſeaſe, and alſo a defect of the *oxygenous principle*.

2. From examining the ſtate of pulſe, which is found *always fuller*, and ſome ſtrokes *quicker*, than previous to geſtation.

3. From a conſideration of the phenomena that attend it, particularly in its more advanced ſtage.

IV. In marking theſe phenomena, a conſiderable variety, it is proper to obſerve, occurs in different caſes, connected with peculiarity of conſtitution, &c.; but in every caſe, in a greater or leſs degree, certain affections pretty conſtantly ariſe; ſome of which, independent of other circumſtances, are even conſidered as giving evidence of the pregnant ſtate.

V. From the ſeveral exciting cauſes, which are peculiar to the different ſtages of its progreſs, the diſeaſes of pregnancy may be reduced to three heads:

1. Thoſe which ariſe from ſimple irritation, or the ſympathetic.

2. Thoſe which owe their origin to diſtenſion of parts, and increaſed circulation into them, or the plethoric; and,

3. Thoſe which join to this the preſſure of the gravid uterus, acting as a mechanical cauſe; termed, therefore, the mixt.

DISEASES OF PREGNANCY.

1. *Sympathetic Diſeaſes.*

VI. Of the firſt claſs, the principal diſeaſes are, af-

fections of ſtomach viz. dyſpepſia, malacia, cardialgia, and hyſteria.

They have been commonly confounded together, and no diſtinct or ſeparate conſideration of each has taken place. This, however, is abſolutely neceſſary, in order to have a juſt idea of the means propoſed for their alleviation.

Dyſpepſia.

VII. The firſt ſpecies, or dyſpepſia gravidarum, is marked by the following train of ſymptoms:

Soon after coition, a ſenſe of lowneſs and depreſſion is felt; various irregular pains occur in different parts of the body. Theſe are ſucceeded, after a certain time, by ſickneſs and nauſea, attended with a vomiting of matter, various in its appearance. This vomiting generally prevails moſt in the morning, or after eating, and is attended with a whimſical capricious appetite for ſubſtances of an unalimentary kind. It is generally moſt ſevere in the erect attitude, and ſomewhat relieved by a horizontal poſition. The duration of theſe ſymptoms varies much in different caſes. They uſually depart after the third month; but their effects are frequently very ſevere in irritable habits, producing an emaciation and decay of the fleſh, to a very conſiderable degree.

VIII. From the appearance of the matters diſcharged, ſome authors have divided this vomiting into two kinds, the bilious and alimentary; the former being moſt frequent in the morning, the latter ſuc-

ceeding the reception of food, as ſoon as digeſtion begins to take place. The former is moſt ſevere, and requires chiefly, therefore, alleviation; the latter is leſs hazardous, from the efforts being leſs ſtraining.

IX. The theory of theſe ſymptoms is ſomewhat obſcure. The general cauſes of dyſpepſia are known to be an impaired tone of the muſcular fibres of the ſtomach, a particular ſtate of its fluid, or ſome local affection impeding its functions. The occurrence of dyſpepſia after conception is too quick to ſuppoſe it to ariſe from any of theſe cauſes; nor is the debility that ſucceeds conception even ſufficient for this effect. It muſt depend, therefore, on a different principle; and to explain it, we obſerve, that the ſtomach has a connection, in a particular manner, with every part. It is to be conſidered, in all reſpects, as a peculiar organ, and as the centre of ſympathy; or, as giving the alarm, when any part of the body is in a morbid or altered ſtate. This power of the ſtomach is not explainable by any apparent connection betwixt it and the ſympathiſing part; and analogous to theſe effects of conception upon it in the female, we find, in hypochondriacs, a proof of its extenſive connection with every part, that every debilitating cauſe occaſions immediately ſymptoms of dyſpepſia.

But though originally the effect of ſympathy, where dyſpepſia is long continued, debility will come to be induced; and on it the obſtinacy of the diſeaſe will at laſt depend. The cauſe of ſympathy then ceaſes ſoon to act; and the impaired tone of the organ, to which it gives origin, continues the diſeaſe till that general inflammatory diatheſis, marking the whole of pregnancy,

but not exquiſitely formed till after the third month, removes any affection depending on this cauſe.

X. Theſe ſymptoms of dyſpepſia are remarked to attend all thoſe ſtates of uterine affection, in which the evacuation is ſuppreſt. They are here not to be conſidered as dangerous; and a favourable prognoſis, therefore, may always be made; yet the efforts of ſtraining, when violent, occaſion abortion at times.

XI. From the hiſtory of the diſeaſe delivered, a diviſion of it into two ſtages is neceſſary to be obſerved, for the ſucceſs of our practice.

The firſt of them may be termed the ſtage of *ſympathetic* irritation.

The ſecond, of correſpondent debility; and for each of theſe a ſeparate treatment is required.

XII. The firſt is attempted by blood-letting, though this requires caution in particular habits, and ſhould only be employed in the real plethoric ſtate: by the uſe of opiates, which requires alſo reſtriction, as prejudicial to the evolution or growth of the fœtus. Their external application to the region of the ſtomach is often moſt ſucceſsful; or their exhibition, by way of injection; by gentle exerciſe in the open air, with a variety of ſcene and amuſement, ſo as to withdraw the attention, as it were, from the morbid feelings.

The ſecond is effected by the uſe of all thoſe remedies preſcribed by phyſicians in dyſpeptic caſes, as neutral ſalts in the act of effervescence, bitters, abſorbents, &c.

Longing (Malacia).

XIII. The ſecond ſpecies of this firſt claſs of pregnant affections is malacia, or longing; by which is underſtood an immoderate deſire of ſome things formerly diſagreeable, and a rooted averſion at other things formerly liked. Though like dyſpepſia, at times attending diſeaſes, in which the uterine evacuation is ſuppreſt, yet it never riſes to that exquiſite degree, as from pregnancy. It is always to be conſidered as an affection of mind; and though no bad effects can attend the oppoſing the object of its wiſh or reſentment, yet, if reaſonable, it ſhould be indulged, as the refuſal increaſes that ſtate of mind on which its continuance as a diſeaſe depends.

This diſeaſe has alſo been remarked as ſtrongeſt in a firſt pregnancy; and for remarkable inſtances of it, recourſe may be had to the different morbid collections of medical writers.

Heartburn (Cardialgia).

Next to malacia, or longing, is the cardialgia gravidarum, or heart-burn. It is marked by heat and pain in the throat and fauces, and an increaſed ſharp ſalivary diſcharge.

Its cauſe we may aſcribe to the ſame ſympathetic irritation, producing the affections already enumerated; but here the digeſtive action would ſeem, as it were ſuſpended, or ſo far weakened as to produce this vi-

tiated diſcharge, inſtead of the proper and complete chylification which ſhould take place.

Its cure conſiſts in the uſe of gentle emetics, alkalies in various forms, particularly the lime water, or aqua kali, as alſo abſorbents.

Hyſterics (*Hyſteria*).

XIV. Laſt in this claſs we here placed the hyſteria. It only at this time attacks thoſe naturally prediſpoſed to it; and there are two particular periods of geſtation, at which it is apt to ſhow itſelf. The firſt is the time of conception, and the ſecond is the after-period of quickening. But though not aſſuming the actual form of hyſteria, women, in general, at the commencement of pregnancy, are very ſubject to pains of the head and teeth, which may be properly referred to this head.

In the treatment of hyſteria, there is nothing at this time eſſentially different from its treatment at other periods.

XV. This then (from VI. to XIV.) forms the firſt claſs of diſeaſes, induced by pregnancy; and they extend, generally, from conception to the middle of the the third month, ſometimes longer.

We now enter upon the ſecond, or thoſe which owe their origin to diſtenſion, and evidently partake of an inflammatory nature. But previous to their conſidera-

tion, it is proper to aſcertain that ſtate of the ſyſtem which gravidity induces, independent of local affection; and which, though formerly hinted at, comes only at this period to be fully eſtabliſhed, and, from the occurrence of certain morbid ſymptoms, to be ſtrongly marked.

General-State of Pyrexia induced by Pregnancy.

This ſtate conſiſts in the formation of pyrexia, or the proper febrile form, by an addition of certain characteriſtic circumſtances to the ſtate of the pulſe mentioned. Theſe conſiſt in a manifeſt exacerbation of febrile ſymptoms, twice a day, correſponding to the natural increaſe of pulſe; the evening exacerbations of which are moſt conſiderable, being denoted by flushing of the face, heat of the palms, thirſt, diſordered ſleep, &c.; and this ſpecies of fever, though not juſt ſo violent in moſt caſes, is ſimilar to what is termed the hectic, or occurs, in other inſtances, of permanent local affection.

XVI. The cauſes of this fever we refer to two heads: 1ſt. uterine irritation; and, 2d. plethora. Uterine irritation, indeed, in the preſent caſe, we find not ſufficient for inducing inflammation; and no actual inflammation occurs during the firſt three months, when ſuch ſimple irritation alone prevails; for, till the eighth week, no ſymptoms of turgeſcence can really take place, as that forms properly the firſt period, when a

ſtop is put to the uſual evacuation. This additional cauſe of plethora, then beginning to take place, it is proper we ſhould next endeavour to explain.

Dr. Lobb has advanced ſome very ingenious obſervations againſt this idea of a plethora exiſting during the whole of geſtation. They are drawn chiefly from a conſideration of the quantity of fluid neceſſarily required for the formation of ſuch a large body as the fœtus and connecting parts, and from obſervation of the ſtrongeſt and healthieſt women being leaſt liable to abortion. By plethora, however, we do not mean any increaſed quantity of fluids in the ſyſtem in general; the previous complaints plainly ſhow that ſuch cannot exiſt, and it will be too abſurd to contend for ſuch a circumſtance taking place. It has been alledged, indeed, that the ſecretions during pregnancy are all diminiſhed; but even allowing this, of which we have no proof, if Dr. Lobb's reaſoning is admitted, it will ſtill be inſufficient. To explain this ſubject, then, we obſerve, that whenever irritation prevails in any part, by the laws of the circulation, a conſiderable afflux is directed this way, and this afflux muſt produce a natural diſtenſion of ſuch parts, while to prevent any morbid circumſtances occurring it is neceſſary, 1ſt, that the facility of diſtenſion in the parts ſhould be equal to the afflux, otherwiſe morbid ſymptoms in the adjacent parts muſt ariſe from accumulation; and 2d, that the ſupply the ſyſtem receives ſhould be greater than uſual, in order to preſerve the natural balance of circulation in parts.

XVII. In the beginning of pregnancy we know, that the uterus forms ſome degree of reſiſtance to its diſtenſion, and that in proportion to the quantity of fluids

ſent to it, which is determined in part by the particular irritability of conſtitution. This of courſe endangers abortion, as the contents of the uterus are then not firmly attached to its cavity. When riſing, however, to a certain height, in order to prevent ſuch a circumſtance, by a law of nature, in conſequence of the ſympathy prevailing between the breaſts and the uterus, the former receive too a degree of irritation, and an afflux in conſequence of this is likewiſe directed to theſe glands, leſſening that towards the uterus. But as the enlargement of the uterus proceeds, the irritation here being ſuperior to the other, ſo the afflux towards the uterus is increaſed, while that towards the breaſts in general gradually diminiſhes, and departs entirely in the laſt months.

XVIII. To explain then, on the foregoing reaſoning, the cauſe of the diſeaſes of this claſs, we remark, that from the firſt moment of conception, in conſequence of its particular afflux to the uterus, the blood continues determined in unuſual quantity to the whole of the internal parts; and of courſe, that a ſtate of collapſe, or diminiſhed action of the veſſels on the ſurface is produced; that this accumulation internally, when proceeding to a certain height, occaſions an increaſed action of the larger veſſels, to reſtore the balance loſt; and hence various morbid affections, both in the hypogaſtric region, and in the ſyſtem in general, ariſe.

XIX. That ſuch a ſtate of the ſyſtem takes place at this period, we prove from this circumſtance, that abortions are then moſt frequent, that women are the more liable to ſuch accidents, in proportion to the coldneſs of the atmoſphere, by which this accumulation is the

more increaſed; hence every practical acoucheur muſt have remarked, that miſcarriages are more frequent in winter than in ſummer; and many women too, during this period, we find remarkably ſubject to obeſity, as marking ſuch a diminiſhed action of the ſurface.

XX. It is this unequal balance that, during geſtation, is obſervable in the ſyſtem, which has given occaſion to the ideas of plethora, ſo univerſally received by phyſicians, in accounting for the diſeaſes of pregnancy, and which has led to the method of cure by veneſection, ſo generally practiſed in this ſtate.

XXI. That veneſection may be uſeful at times, in leſſening the power of reaction in the larger veſſels where unuſual accumulation to the uterus occurs, and increaſes the natural ſtate of pyrexia to a morbid degree, we do not deny; but in every caſe it is more as a palliative than a radical cure, and the indiſcriminate uſe of it, where no violent reaction occurs, muſt be attended with the worſt of effects, where women are of a delicate irritable habit, by increaſing after geſtation the cauſe of the complaints it is intended to remove.

CLASS II. *Plethoric.*

XXII. From this ſtate of the ſyſtem then we have endeavoured to eſtabliſh, different affections ariſe, and the firſt of theſe that occurs to be noticed is pain and tumefaction of the breaſts.

Affection of Breaſts.

XXIII. The breaſts have been always allowed by authors to poſſeſs a remarkable ſympathy with the uterus, and to account for their preſent diſtenſion; beſides this ſympathy they have endeavoured to explain it, by an anaſtomoſis between the epigaſtric and mammary arteries. This, however, Dr. MONRO has of late demonſtrated to be ſo inconſiderable, that it cannot be explained in this way; and the preſent complaint, therefore, we aſcribe to the internal accumulation of the ſyſtem to the uterus, which at firſt receiving an enlargement of its bulk more ſlowly, and thus forming a reſiſtance to the entrance of the accumulated fluids, excites, as we formerly obſerved, a ſympathetic affection of the breaſts, which, at the ſame time, are the only organs unevolved, and capable of admitting an eaſy diſtenſion.

XXIV. In proof of this ſympathy we find, when in the laſt months, the reſiſtance to the paſſage of the fluids into the uterus is leſſened, ſo that its diſtenſion takes place with a more rapid progreſs than before; the farther turgeſcence of the breaſts generally ceaſes, and they even become in ſome degree flaccid.

XXV. The treatment of the breaſts, in this ſtate, then, conſiſts in endeavouring to palliate and allow their diſtenſion, till the latter period of pregnancy; and the means of performing this depends on the removal of preſſure ariſing from articles of dreſs, and relaxing the part itſelf by various lubricating and emollient applications: nothing indeed is ſo pernicious in this caſe as compreſſion. When pregnancy is wiſhed to be con-

cealed, it would be to no purpoſe to point out the miſchiefs that ariſe from it; but even with married women this fault prevails; and from a deſire to conceal their ſituation, the ſame mode of dreſs is continued during pregnancy without any alteration. In a firſt pregnancy, it is even more hurtful than afterwards, for the breaſts then become moulded into a certain form, which they always afterwards retain; hence, where compreſſed at this time, they are prevented from expanding, and the nipple, inſtead of continuing to elongate by the diſtenſion of the breaſt, and become more prominent, is generally flattened, and forced in, ſo that afterwards it cannot be eaſily graſped by the mouth of the child, and the taſk of nurſing becomes impracticable; nay abſceſſes from this cauſe, before delivery, frequently form in the breaſt, which would never naturally take place at this period were compreſſion avoided. It is, on this account, independent of conſtitutional reaſons, that ſo few women in high life are capable of acting the parts of mothers, and that among the poorer claſs ſuch obſtacles more rarely occur.

Retroverted Uterus (Retroverſio Uteri).

XXVI. But a more formidable diſeaſe, at this period, to which women are ſubject, is the Retroverſio Uteri; it conſiſts of the fundus, when enlarged to a certain degree, and beginning to be ſupported on the promontory of the ſacrum, deſcending ſuddenly into its hollow, which, from its weight, occaſions the os tincæ, or other extremity of the organ, to be carried in the oppoſite direction, and thus ſo far alters the ſituation of the urethra

connected with it, that the emiſſion of urine is prevented.

XXVII. The ſymptoms of this diſeaſe are marked by a ſlight degree of uterine pain at firſt; an inclination to preſs downwards gradually ſucceeds, with a deſire to paſs urine. At firſt, the latter is performed with difficulty, but ſoon the action of the uterus, attended with ſtrong down-bearing pains, increaſing, a total obſtruction to the diſcharge of urine takes place; theſe ſymptoms proceed, and on examination, by a finger in the vagina, a tumour is felt advancing downwards, in proportion to the ſtraining of the patient, and occaſioning efforts ſimilar to thoſe employed in parturition. From the ſuppreſſion of the natural evacuations, both by urine and ſtool, inflammation, in conſequence of diſtenſion, muſt occur, and the uterine tumour at laſt coming to poſſeſs the lower part of the pelvis, becomes ſo enlarged, in conſequence of the inflammation excited in it, by its deplacement, as to prevent the poſſibility of its being replaced, the dimenſions of the pelvis, at its ſuperior aperture, being more contracted than thoſe below. Acute fever, with delirium, at this period ſupervening, the patient is ſoon cut off; or, from the enlarged ſize of the bladder (which frequently in this laſt ſtage is known to reach as high as pregnancy in the 7th or 8th month, or much above the umbilicus), convulſions taking place, the patient by a paroxyſm is carried off.

XXVIII. This diſeaſe, though formerly known, was firſt properly pointed out by the late Dr. HUNTER, who has written a very excellent paper on it, in the London Medical Tranſactions, and has publiſhed alſo

the diſſection of a caſe of this diſeaſe in one of his elegant plates.

XXIX. This diſeaſe is peculiar to pregnancy, and the period of it, at which it can only happen, is any time from the third to the term of the fifth month.

XXX. In moſt women, it occurs at this period, in a ſlight degree; the firſt ſymptoms of pain, however, generally give an alarm to the patient; and if her ſituation at all admits reſt, an horizontal poſture, as giving eaſe, is what ſhe naturally has recourſe to. It never, therefore, in women of any faſhion, occurs to a violent degree, and it is only amongſt the poorer claſs, whoſe occupations do not admit the neceſſary care at this period, that it riſes to a formidable height. Thoſe women are particularly prediſpoſed to it, in whom the pelvis is much enlarged behind, or in whom its general capacity at the brim rather exceeds, where any violent ſtraining is then employed, it is ſure to happen; it is only in a few inſtances that it has proved fatal; and ſeveral caſes are mentioned, where the introduction of the catheter, in its laſt ſtage, being with difficulty effected, a moſt ſurpriſing quantity of bloody urine was diſcharged. The late Dr. YOUNG, of Edinburgh, uſed to mention one caſe, where he had taken away no leſs than eighteen Engliſh pints. Dr. AIKIN, of the ſame place, mentions a ſimilar caſe, where he took off near twelve Engliſh pints; and in the different periodical publications, a number of remarkable inſtances are recorded of this diſeaſe. Two caſes of it occurred in Edinburgh, to my own knowledge, which proved fatal, and practitioners are daily called in where it occurs in a ſlight degree.

XXXI. For the cure of this diſeaſe, two indications naturally ariſe, the firſt, to diminiſh the ſize of the tumour itſelf, preventing reduction, or to enlarge the dimenſions of the pelvis at its ſuperior aperture, ſo as to admit, where ſtill ineffectual, the ſucceſs of the former; and ſecond, to replace it in its proper ſituation.

XXXII. The former part of the firſt indication is anſwered particularly by leſſening the diſtenſion of the contiguous organs. The organ chiefly diſtended is the bladder of urine, and the catheter therefore ſhould be immediately employed. In its uſe however here, it requires a very nice attention to the ſituation of the parts. It muſt generally be introduced in a direction different from what is uſually obſerved. Where the diſeaſe has arrived at a conſiderable height, the male catheter will be more properly employed. Several attempts will even be neceſſary before ſucceeding, and you may be even repeatedly foiled. It will often take place at laſt, rather as a lucky hit, than as a real proof of dexterity. As the chief part of the cure depends upon the evacuation of the urine, the other means you employ are to be conſidered rather as auxiliaries to it. If ineffectual however at firſt, before repeating your attempts, let the contents of the rectum be evacuated, which will give ſome advantage if the bladder is much diſtended. It is unſafe making any attempts to reduce the fundus, as laceration of it may be the conſequence. Fomentations therefore are the next means to be had recourſe to; and if conſiderable fever is induced, or even without this, with a view to prevent inflammation, bleeding ſhould be liberally had recourſe to. Theſe means will be much aſſiſted by the poſture of the patient, whoſe pelvis ſhould be raiſed conſiderably higher

than her ſhoulders, while laying in bed, to prevent as much as poſſible the increaſing deſcent of the fundus. When ſucceſsful, and the urine is evacuated, the replacement of the uterus is to be attempted, and the method of reduction conſiſts in ſimply placing the patient on her knees and arms, with the head reclined, and introducing the hand lubricated into the vagina, endeavouring to puſh the tumour above the hollow of the ſacrum to its former ſituation. When once replaced, reſt and the horizontal poſture are to be particularly enjoined, the urine for ſome time is to be carefully taken off by the catheter, and the patient not even allowed to make the common natural efforts.

XXXIII. But, where the diſeaſe has gained, from the neglect of the patient and unſucceſsful attempts of the operator, its utmoſt height, and reduction cannot be effected, it next remains to inquire what methods are left to relieve the patient. The firſt ſuggeſted has been to attempt the introduction of a catheter into the os tincæ, which, being puſhed through the membranes, may occaſion by their rupture a diſcharge of the waters, and then abortion will enſue. It is indeed remarkable, and has been obſerved by all the writers on this diſeaſe, that no tendency to abortion naturally occurs, which can only proceed from the irritation being confined more to the fundus than to the os tincæ, which ſeems to lead ſomewhat to the theory of labour. Where the os tincæ can be reached with the catheter, when other means fail, it may be employed as a laſt expedient. But, at the ſame time, when we conſider the ſlow progreſs that abortion frequently makes, from the greater part of the ovum, on which the enlargement of the uterus depends, continuing attached at this early period for

long after the waters are evacuated, the patient may die of the diſeaſe before this expedient has time to ſucceed.

XXXIV. A ſecond means propoſed in thoſe deſperate caſes of this diſeaſe, where all others have failed, is the enlargement of the pelvis itſelf by the operation of SIGAULT. The circumſtances which have favoured this propoſal here, are

1ſt. That the chief difficulty to the reduction of the fundus is the different capacity of the ſuperior and inferior apertures of the pelvis; for the fundus deſcending into a more enlarged ſpace below than what it originally occupies, becomes ſo enlarged by inflammation that its original ſituation cannot contain it, and hence it cannot be eaſily preſſed through the more narrow opening of the brim; while the latter, being enlarged by the operation of SIGAULT, promiſes therefore to give an equal ſpace above, for the replacement of the fundus, to what it poſſeſſes below.

2d. After death, where the reduction could not even be made, by dividing the ſymphyſis, it came to be eaſily replaced; but to this operation ſome objections may be made. In the firſt place, it is found, that even where it is performed in the progreſs of labour, and where no morbid ſtate of the parts has taken place, the patient has been frequently cut off by the ſupervening inflammation. In the preſent caſe, the whole cavity of the pelvis is already in this ſtate, and the addition of a new irritation, from the application of the ſcalpel, muſt very ſoon induce gangrene where only ſimple inflammation exiſted; for theſe reaſons, little is to be expected from this operation, and it is more to be conſidered as a deſperate reſource than a ſafe expedient.

The ſame obſervations may be applied to another mean that has been thought of, and that is, the puncturing the bladder itſelf, to allow the diſcharge, as gangrene muſt ſoon ſucceed any wound inflicted in its ſubſtance.

XXXV. From the view then we have offered of this diſeaſe, too much attention cannot be paid to guard againſt its arriving at any height. Its firſt ſymptoms are ſlight, and liable therefore to be neglected; but, wherever, at this period of pregnancy, the leaſt threatening of this kind occurs, the patient ſhould be inſtantly confined to a horizontal poſture, coſtiveneſs removed, and a ſuppreſſion of urine, by the uſe of the catheter, timeouſly guarded againſt.

Fixt Abdominal Pains (Pleuriſy, Cramps, &c.)

Another diſeaſe, to which women are firſt ſubject about the middle of geſtation, is fixed pain of ſome part affected by the enlargement of the uterus.

XXXVI. When, from the ſtretching of the broad ligaments, it affects them, in the form of a pleuriſy, or rather what may be termed fixed ſtitch of the ſide.—In theſe caſes it is common to bleed, but more in order to prevent inflammation than as really curing the complaint. The inteſtines ſhould alſo be cleared; and, after this, an anodyne glyſter thrown up, which will generally alleviate the pain. Reſt has alſo here an equal effect with any other medicine you can employ.

XXXVII. At other times ſuch pains occur in the form of cramp, or abdominal ſpaſm, and the ſame means will

be found effectual in their removal. It is remarkable in theſe caſes, that their violence ſeems particularly increaſed by heat.

Convulſions.

XXXVIII. But a more alarming complaint than any we have mentioned, and which begins often at this period, though not excluſively confined to it, is the convulſions of pregnancy. They are generally ſudden in their attack, without any previous ſigns to indicate their approach; more rarely, however, they are preceded by a weight, or heavy pain, in the uterine region, ſuch as marks diſtenſion.

XXXIX. This diſeaſe attacks in paroxyſms or fits. They are generally preceded by violent pains in the head, varying in its ſituation; wild motion of the eyes, which roll in an uncommon manner in their ſockets; and a general determination to the head, appearing from the flushing and turgeſcence of the face. In the paroxyſm itſelf, all ſenſe and motion come to be loſt, and the face, and ſome of the extremities, are diſtorted in a particular manner, while a frothy moiſture iſſues at the ſame time from the mouth, and the tongue is forced out, or retained cloſely between the teeth, ſo as to ſuffer conſiderable injury.

That this diſeaſe in pregnancy is ſympathetic, and ariſes from uterine irritation, is not to be doubted; but it remains a matter of doubt, whether in this caſe a fullneſs of the veſſels of the brain neceſſarily attends this uterine irritation. Convulſions in pregnancy we find

occur in very oppoſite habits; at one time they attack the robuſt and evidently plethoric, at another time they attack thoſe of an irritable and debilitated conſtitution: hence we would infer, that a turgeſcence of the veſſels of the brain, or an increaſed impetus of the circulation to the head, is by no means neceſſary to this affection; that, as the circulation is generally irregular in the time of the paroxyſm, ſuch an accidental plethora may occur. But, in the cure of the diſeaſe itſelf, it requires no primary attention; and that the uterine irritation, or original morbid cauſe, demands chiefly our attention. To remove this in abſence of the paroxyſm, veneſection taking off the uterine accumulation, ſhould be performed, and that even liberally; the inteſtines are then to be cleared, and afterwards a large opiate exhibited in glyſter to the ſeat of the affection itſelf: the principal indication ſeems to be to reſtore the energy of the brain, and that by the ſudden application of cold to the face. This is a practice recommended by Dr. DENMAN, and which he has found ſucceed after every other means, particularly bleeding, has been ineffectually employed. Bleeding, however, in all caſes of pregnant convulſions, is found a uſeful palliation. It is recommended by every writer on the ſubject; and, among the French particularly, was formerly uſed in this diſeaſe to a moſt extravagant height; but, in delicate women, the after-conſequences of ſuch evacuations are to be conſidered, and, where the diſeaſe is mild, and approaches ſomewhat to hyſteria, veneſection ſhould be very ſparingly employed.

XL. But this diſeaſe often ariſes from certain accidental cauſes, which cannot be relieved by the treatment enjoined: thus it ſometimes depends on an improper poſition of the fœtal head, preſſing on ſome part

of the pelvis; or it is produced at times by an oblique poſition of the uterus, in ſome caſes of diſtortion, where its expanſion is prevented.

XLI. Where convulſions begin early in pregnancy, they are leſs to be dreaded; but in the latter months they are often alarming, and a ſingle paroxyſm has been known to kill.

XLII. In the convulſions of pregnancy, particularly where advanced, there is this peculiar circumſtance, that the motion of the child is felt uncommonly ſtrong; —a proof of that ſympathy which ſubſiſts between the nervous ſyſtem of the mother and that of the fœtus.

XLIII. Some authors have obſerved, that convulſions at this period are more common to the inhabitants of ſome countries than others, and that they occur more frequently, for example, in England than in Scotland. This fact, however, may be called in queſtion; and I know, from ſome eminent practitioners, that in ſome parts of England a caſe of them is almoſt never known to occur; beſides, without ſome peculiarity of conſtitution can be pointed out to account for their more frequent occurrence, the difference in the mode of living is not ſufficient.

XLIV. Where a woman has been formerly accuſtomed to this diſeaſe, there is leſs danger from its attacks in pregnancy.

XLV. All authors have agreed in conſidering diſtenſion of the brain as the cauſe of this affection; but diſſections give no proof of ſuch a cauſe exiſting: and why, there-

fore, continue a theory which is founded only on ſuppoſition? This diſeaſe, however, we ſhall have occaſion afterwards to reſume, as it is frequently combined with labour.

Palſy.

XLVI. Connected with convulſions, and which has been known to occur in the pregnant ſtate, though very rare, is palſy.

XLVII. There is generally here no diſpoſition in the habit, by which we can judge previous to the attack. The cauſe of it we can only refer to preſſure. It generally comes to be very ſenſibly relieved, if not altogether cured, after delivery. It is liable, however, to return, with more ſeverity, in a ſucceeding pregnancy; and, if not then departing after delivery, is found generally incurable. I never ſaw a caſe of it; and only two are mentioned, in his extenſive practice, by the late Dr. YOUNG.

CLASS III. *Mixt Diſeaſes.*

The laſt claſs of diſeaſes that falls under our attention in the pregnant ſtate is thoſe from preſſure, or where, in addition to the former cauſe of local plethora, a mechanical power is added, increaſing it. The affections of this claſs are more numerous than any of the former,

and extend, at leaſt, from the beginning of the ſeventh month to the period of geſtation.

Coſtiveneſs (Obſtipatio).

XLVIII. The firſt of them that occurs to be mentioned is coſtiveneſs. This is a diſeaſe which, from their mode of life, is at all times common to the ſex; but, during pregnancy, from the preſſure of the gravid uterus, it is increaſed to what may be termed a morbid degree. The ſymptoms which attend coſtiveneſs, and which are liable at this time to be referred to a different cauſe, are, a particular uneaſineſs of ſtomach, attended with a lowneſs and depreſſion, a quickened pulſe, a ſenſe of abdominal ſtricture, vertigo, &c.

XLIX. Such a ſtate of the inteſtines is favoured, independent of the preſſure of the uterus, by the degree of fever mentioned as preſent in the ſyſtem during the whole of geſtation; by the greater indulgence of women of their natural ſedentary life at this period; by the uſe of ſubſtances of an indigeſtible nature, which their appetite of longing frequently leads them to prefer; and, laſtly, by an increaſed abſorption of the aliment itſelf, in conſequence of the preſſure exciting more powerfully the action of the lacteals, ſo that the more purely feculent part only remaining in the inteſtines, is formed, by retention, into hardened ſcybala, or lumps, reſiſting the natural periſtaltic motion for their diſcharge. Where negligent, this accumulation has been often known to riſe to a violent degree, or to prove an impediment to labour, or produce very ſerious conſequences after delivery.

L. An attention to the inteſtines is alſo neceſſary with another view, as it tends to prevent that local plethora of the hypogaſtric region from riſing to the height of diſeaſe. The London practitioners are particularly attentive to this circumſtance, and they find, that thoſe women, in whom the bowels are kept rather lax, during the whole of geſtation, are liable to few of the diſorders that affect others in that ſtate. To remove, therefore, this diſeaſe, or rather to prevent its formation, a diet of eaſy aſſimilation is to be preferred. Many authors recommend that, with this view, vegetables ſhould be chiefly uſed; but this muſt be regulated by the conſtitution of the patient; for where ſhe has been unaccuſtomed to a vegetable diet, ſuch a liberal uſe of it, as thus enjoined, may produce ſymptoms even worſe than the diſeaſe. On this account, it will be generally preferable, that the inteſtines be gently excited to action, and the matter contained in them prevented from forming into hardened ſcybala, by laxatives of an oleous, or lubricating nature. One of the beſt remedies of this kind is the caſtor oil, which is kept light by the junction of a ſmall quantity of any ſpirit. It may be given in the quantity of two tea-ſpoonfulls, and repeated every ſecond night, or occaſionally as neceſſary. Beſides this, many other laxatives may be mentioned, as, the magneſia, ſulphur, cream of tartar, the ſoluble tartar, &c. But women are generally themſelves in the habit of uſing ſome laxative: hence, as they are accuſtomed to it, and know its effects in their uſual doſe, they will be more able to proportion it. Where, however, the diſeaſe has gained a conſiderable height, more powerful purgatives muſt be employed; or, as this practice may be rather unſafe, emollient injections, which remove the accumulation, as being chiefly con-

fined at firſt to the rectum, are to be employed with a temporary view, and then the uſual laxatives, proper to pregnancy, will have ſufficient effect.

Piles (*Hæmorrhoïs.*)

LI. A frequent effect of coſtiveneſs in the pregnant ſtate, or at leaſt, if not an effect, influenced by it, is the production of another diſeaſe, the piles.

LII. The piles conſiſt of an effuſion of blood from the extremity of the rectum, or the formation of ſmall painful ſwellings in that ſituation, with terminate frequently in ſmall ulcers or fiſtulous ſores, the former being named the internal, the latter the external kind.

LIII. In pregnancy, from the ſtate of the hypogaſtric region mentioned, a prediſpoſition to this diſeaſe occurs; and where preſſure takes place, interrupting the circulation about the extremity of the rectum, its veſſels yielding from diſtenſion in particular places, part of their fluids comes to be effuſed into the cellular membrane, and the diſeaſe thus produced.

LIV. In proof, that accumulation, or a ſlowneſs of circulation in theſe parts, independent of preſſure, is ſufficient to occaſion the diſeaſe, we obſerve in the other ſex that thoſe much accuſtomed to venery, or who have had frequent inflammations of the genital organs from a venereal cauſe, and in whom, conſequently, a greater afflux to theſe parts has been produced, are moſt liable to its attacks.

LV. This diſeaſe is always troubleſome, and in

women ſeldom to be radically cured, as its attacks are generally renewed from the ſame ſtate of parts, recurring in a ſucceeding pregnancy.

LVI. In attempting however the cure of hæmorrhoids, three circumſtances merit attention:

1. To remove as far as poſſible the cauſes producing diſeaſe; and this is only to be done by obviating coſtiveneſs, and enjoining a horizontal poſture; for general bleeding, by leſſening the force of circulation, will naturally increaſe the plethoric ſtate of the venous ſyſtem, occaſioning ſoon a more violent attack of the diſeaſe; topically employed in this ſituation, it is unſafe, eſpecially in pregnancy, and hence is very improperly recommended by many practitioners,

2. To alter the ſtate of the part in the external kind, where tumours exiſt, by emollient and ſedative applications; and in the internal, where there is merely a rupture of the venous coats, producing hæmorrhage, by the uſe of aſtringents to conſolidate the texture of the parts; and,

3. To allay the pain and uneaſineſs attending the diſeaſe, by opiates in injection.

LVII. This diſeaſe, though at firſt only produced by pregnancy, is liable to have its future attacks recur, independent of this ſtate, when any cauſe of irritation, exciting an increaſed afflux here, is applied: hence few women who have borne children are ever afterwards entirely free of the diſeaſe; nay, frequently after the menſes entirely depart, it obſerves in many a periodical recurrence, a hæmorrhage taking place from this ſource twice or oftener in the ſeaſon, and that to a violent degree, being preceded by an affection of the ſtomach,

and other ſymptoms ſhewing it now connected with the general ſtate of the ſyſtem.

Swelling of Legs (Œdema. Varix).

LVIII. From the ſame cauſe which produces piles, when the uterus, increaſing in its ſize, preſſes on the veſſels that ſupply the circulation of the lower extremities, and thus retards the paſſage of their fluids, *œdema* and *varix* are produced. The firſt extends very generally over the lower extremities, and particularly on that ſide to which the uterus naturally inclines; it begins at firſt in the feet, next occupies the legs, then riſes to the thighs, and even is extended to the labia pudendi: at firſt this ſwelling yields to a horizontal poſture, and is generally gone in the morning, though conſiderable at night. In its progreſs however, as the parts come to yield to the diſtenſion, no change is perceivable at any time; it is more conſiderable in twins, and often gives a ſign of them by occurring in women then, though not appearing in their former pregnancies. If the conſtitution is ſound, there is no danger from this complaint, as it generally departs after delivery, and that even in the ſpace of twenty-four hours. Where however in the habit there is a natural tendency to dropſy, the foundation of it is frequently laid at this time; and, by the preſſure on particular organs, a tendency to ſchirrus is afforded.

LIX. We can only here aim at palliation by a horizontal poſture, the uſe of mild laxatives, and occaſional veneſection, if the patient is robuſt. Where real dropſy occurs, it is diſplayed by a general affection of the body, as well as the œdema of thoſe parts, influenced

by the preſſure of the uterus; other means are then to be attempted, as gentle exerciſe, friction, and the uſual remedies employed in the other caſes of dropſy; though there is a probability that the patient may ſink ſoon after delivery.

LX. Varix again conſiſts generally in the partial diſtention of ſome of the veins of the lower extremities, their coats being more lax at particular places, and yielding to the impulſe of the fluids: it is very ſeldom, however, they yield to that degree as to occaſion any rupture; if it ſhould occur however, aſtringent applications may be had recourſe to; but in the form it commonly appears, we are merely to attempt palliation, by the ſame means recommended in the treatment of œdema.

Spaſmodic Pains (Spaſmi).

LXI. Theſe complaints laſt deſcribed are ſucceeded by ſpaſms of different parts; for as the uterus increaſing retains ſuch a number of muſcles in action, from ſome added accidental irritation they are frequently thrown into a ſpaſmodic ſtate, and thus cramps of the thighs, pains of the legs, &c. are produced. They generally go off of themſelves, being merely temporary. We have indeed no cure for them, though, when violent, they may be palliated by opium.

Cough and Dyſpnœa.

LXII. In the laſt months of geſtation, when the uterus has gained nearly its utmoſt bulk, and reaches ſo high as to compreſs the diaphragm, cough and dyſpnœa are

produced. Theſe ſymptoms are very uneaſy to the patient, and more ſo in the firſt pregnancy than afterwards. They are alſo more conſiderable in the caſe of twins, and where the uterus receives an uncommon diſtenſion from too great a quantity of waters: all we can aim at here is to palliate. If the breathing is more affected at times, and the diſeaſe ſeems to attack more in fits, veneſection will then be uſeful. If the cough is much increaſed by the horizontal poſture, and particularly troubleſome in bed, the ſituation of the patient muſt be kept as erect as poſſible, and an opiate, to leſſen the ſenſe of irritation, adminiſtered.

Vomiting.

LXIII. From the ſtate of theſe parts, the ſtomach is frequently brought alſo to ſympathiſe, and vomiting, ſimilar to what occurred in the commencement of pregnancy, is induced. It is here even leſs in our power to palliate, and all the means we can employ is the uſe of ſmall quantities of eaſy aſſimilated food at a time; and it will be even neceſſary for the patient to keep herſelf very abſtemious. It has been adviſed in theſe caſes, where the vomiting is very ſevere, and threatens a premature occurrence of labour, to attempt altering the poſition of the uterus, and to incline it more to the oppoſite ſide, that the ſituation of the ſtomach may not ſo readily be affected. This is an expedient however we cannot eaſily employ, and it will require more attention to retain it than the patient will chuſe if employed.

Incontinence and Suppreſſion of Urine.

LXIV. Within a few weeks of delivery, as the uterus

has gained its full extent, it inclines to defcend a little towards the brim of the pelvis, preparatory to parturition: in fome women it does this more than in others, and is more liable to do it in a firft labour than afterwards. In this way, as it comes to prefs on different parts of the bladder, it naturally affects the difcharge of the organ, and thus either incontinence or fuppreffion of urine enfues. In the former cafe, as a rawnefs or excoriation is liable to be produced, a thick compreſs or piece of ſpunge ſhould be properly fixed to receive the urine flowing from the uretha, thus to render the ſituation of the patient as ſupportable as poſſible. In the latter caſe, the catheter ſhould be timely employed, and attention paid that this ſymptom do not continue during the progreſs of labour.

LXV. Theſe form then the ſeveral diſeaſes to which pregnancy is ſubject: few of them are really in their nature dangerous, though their violence may be increaſed by miſmanagement, or ſome peculiar ſtate of conſtitution rendering their effect more powerful.

Accidental Diſeaſes.

LXVI. During pregnancy, women are ſubject to thoſe other diſeaſes which may affect them at any other period; and their management alſo, from the ſtate of geſtation, is a point requiring particular attention. We ſhall offer ſome obſervations on a few, that have been mentioned by authors as moſt commonly occurring.

Dropſy.

LXVII. Women, from their more lax conſtitution, are more liable to dropſy than the other ſex; and aſcites fre-

quently takes place during the time of pregnancy. If exiſting before conception, it is often difficult to diſtinguiſh it from pregnancy; and the very firſt practitioners have been deceived in offering an opinion with regard to the exiſtence of pregnancy in this caſe. With reſpect to its management, diuretics are to be preferred to every other means, as leaſt liable to endanger abortion; and where, from the very great diſtenſion, ſymptoms are urgent, tapping may be even performed, and that without any danger, only obſerving to make the puncture on the oppoſite ſide from that to which the uterus inclines. I lately attended a caſe where the operation was twice performed during the time of geſtation, and the laſt time even within a few weeks of delivery. Some authors have adviſed, inſtead of the operation, that a catheter ſhould be paſſed within the os uteri, to rupture the membranes, that a premature delivery may be brought on; but I would aſk ſuch authors, on what does the progreſs of dropſy depend? certainly on an increaſing debility of the ſyſtem, which is the cauſe of the original affection. It is well known to every practitioner in midwifery, the hurtful effects which arife to the ſyſtem, either from artificial or premature delivery; and in the laſt caſe particularly, as the uterus has not gained its full extenſion, the placenta continues ſo firmly attached, that you cannot depend on the quantity of hæmorrhage that may take place, and thus the ſyſtem may be ſo far weakened as entirely to cut off any future hopes of cure. Beſides, if allowed to go to full time, the labour is generally ſufficiently eaſy; and if there is no morbid affection of any of the viſcera, there is then great proſpect of recovery; but if there is, the patient generally ſinks ſoon after parturition, which is even another argument againſt premature labour, as we cannot accurately determine, before-

hand, with regard to the cauſe of the diſeaſe. This complaint was formerly more frequent during pregnancy, when the too liberal uſe of veneſection prevailed for the cure of pregnant diſeaſes. The French carried it to more exceſs than ever we have done in this country; and hence, in peruſing the obſtetrical writers of that nation, you will find in their collections of caſes a greater number of inſtances of dropſy combined with pregnancy. MAURICEA, for example, mentions ſeveral remarkable caſes of that kind, where, even on delivery, the abdominal tumour, from the exceſſive diſtenſion, was no way ſenſibly diminiſhed. In the laſt months, as the uterus preſſes up the diaphragm, and impedes the functions of theſe parts, the accumulation neceſſarily occurring from this cauſe gives a tendency to hydrothorax, the foundation of which is often laid during pregnancy. Anaſarca is generally the mildeſt form of the diſeaſe; and unleſs combined with ſome of the others, it ſoon departs after delivery. Dropſy of the ovarium again very rarely occurs during the period of child-bearing, as that ſtate of the ovaria which favours its occurrence is rather the effect of age; hence it more commonly ſimulates pregnancy than is combined with it.

Whites (Fluor Albus).

LXVIII. Another diſeaſe, that occaſionally appears during pregnancy, is fluor albus. It is generally of that ſpecies, the ſeat of which is confined to the glands of the vagina; it depends, perhaps, on the preſſure of the gravid uterus on the ſuperior parts of the pelvis, occaſioning an unuſual determination to the vagina, and which, perhaps, is neceſſary, that the glands may be accuſtomed to a pre-

ternatural ſecretion of their contents previous to delivery. This, however, we find riſe to a morbid degree, and the diſcharge acquires a conſiderable acrimony. For its palliation, aſtringent injections are to be occaſionally thrown up, and compreſſes applied to the parts to prevent excoriation.

Rupture (Hernia).

LXIX. When, previous to geſtation, a patient has been ſubject to hernia, the ſtate of the diſeaſe is generally affected by the enlargement of the uterus. In all caſes of this diſeaſe, two ſtages of its progreſs may be marked; the firſt we may term that of ſimple protruſion; the ſecond, and more dangerous, of morbid adheſion: if the diſeaſe is only in its firſt ſtage, as the uterus enlarges, and the inteſtines are carried up by it, theſe herniæ generally diſappear, the inguinal about the fifth or ſixth month, and the umbilical again about the eighth. If in the ſecond ſtage again, and the inteſtine does not yield ſo as to be carried upwards by the uterus, the preſſure of the latter on it in its morbid ſituation always endangers ſtrangulation: wherever it can be eaſily reduced it ſhould be done, and great attention paid to the ſtate of the inteſtines. In labour, particularly, every effort of voluntary ſtraining ſhould be ſuſpended by the patient as much as poſſible; and if ſymptoms of inflammation ſhould appear, or thoſe which at another time indicate the operation, labour, if not commenced, is to be immediately brought on, that the preſſure of the uterus being taken off, gangrene may be prevented. The umbilical hernia has been ſuppoſed as moſt frequently occurring in pregnancy; and it has been remarked by authors, that adheſions in this ſpecies more readily form and render

the conſequences during pregnancy more to be dreaded: the diſeaſe indeed, though continuing for ſeveral pregnancies, generally proves fatal at laſt; and this is favoured by the injury which the inteſtine naturally ſuffers from the efforts of labour, giving a tendency to gangrene.

Stone (Calculus).

LXX. Some authors have mentioned calculus as a diſeaſe alſo liable to affect pregnancy. Women, however, have been obſerved as leſs ſubject to this diſeaſe at all times, and that chiefly from the difference in the ſtructure of the urinary paſſages, giving an eaſy outlet to the ſtone when formed. From this, then, we may conclude, as an obſtruction of theſe paſſages more readily occurs in pregnancy, the diſeaſe ſhould be at this time more frequently met with: but experience by no means confirms this; and though inſtances are recorded of labour having been impeded by this cauſe, yet they are ſo very rare as to have no influence on general practice. Extraction would certainly be, at this time, highly improper; and if even forced into the uretha, from the ſtructure of the parts in the female, it can be readily puſhed back. You will meet with a few ſingular caſes of this diſeaſe, at the preſent period, in the Memoirs of the Royal Academy of Surgery.

Nephritic Complaints (Nephritis).

LXXI. From the ſame cauſe of the preſſure of the uterus on the ureters and region of the kidneys, nephritic complaints may be induced; for their ſecretion, and even

evacuation being impeded, gives a tendency to the formation of nuclei, which afterwards form into regular concretions when defcending into the bladder; and thefe complaints often begin during pregnancy, of which, previous to this, there was no appearance.

Jaundice (Icterus).

LXXII. Connected with nephritis, and arifing from the fame fource of uterine compreffion, it remains to mention the icterus gravidarum. It is fuppofed to arife from an obftruction to the mouth of the ductus communis choledochus, by which the paffage of the bile into the duodenum is prevented, and its return into the fyftem occafioned. It is, in this cafe, merely a temporary difeafe, and readily departs after delivery; Mr. White, of Manchefter, has greatly recommended the ufe of raw eggs in its cure; and in what way their action is here exerted we fhall leave that ingenious author himfelf to explain.

Venereal Difeafe (Lues).

LXXIII. Women, during pregnancy, are lefs fubject, it has been remarked, to the febrile contagions: they may, however, be affected with a venereal taint. It has been alleged by authors, that the cure of the conftitutional difeafe cannot fafely be conducted at this period, as endangering a premature delivery: but in all the cafes of this kind that I have had an opportunity to attend, I have found them more eafily cured than at any other time, and a very little mercury is generally fufficient to effect it. It is the want of attention to this circumftance that the natural ftate of pyrexia exifting during pre-

gnancy is favourable to the action of the remedy, and that the ſame quantity of mercury ſhould not be uſed as at another time, which has occaſioned thoſe hurtful effects commonly attending its uſe at this period. The mercurial fever, therefore, ſhould never be carried here to any height; and if the practitioner underſtands the proper principles of treatment, there is no difficulty of curing it during geſtation.

Salutary Effects of Pregnancy.

LXXIV. We have thus ſeen the ſeveral morbid effects which gravidity is liable to induce: but it is not to be denied that its influence at the ſame time is often conſiderable on the conſtitution, and that in the removal or palliation of ſome diſeaſes which occur in the unimpregnated ſtate. Chloroſis, and that ſpecies of hyſteria peculiar to the virgin ſtate, are entirely removed by it. Phthiſis pulmonalis receives a moſt ſenſible relief, and has even its iſſue protracted as long as pregnancy remains, though the patient is liable to ſink ſoon after delivery. This has generally aſtoniſhed phyſicians, and the cauſe of it has not yet been properly explained. In the——

1ſt place, we obſerve, that the uterine ſyſtem, and the parts ſympathiſing with it, are the ſeat of all increaſed determinations during pregnancy. Hence the quantity of fluids muſt be leſſened to the ſeat of the diſeaſe, and favour a re-union of texture where ulceration has taken place.

2. A general diſpoſition, favourable to healing, or a tendency to that general inflammatory diatheſis, which produces, in divided parts, a benign pus, is con-

ſpicuous, and which Dr. STARCK's late remarks on tuberculous conſumption ſhews the propriety of; and,

3. A defect of the oxygenous principal prevails, and the mind receives a ſenſible alteration, the effect of which we cannot determine, though it has been obſerved, that from mania a ſimilar relief takes place in this diſeaſe as from pregnancy.

General Treatment of Pregnancy.

LXXV. Having finiſhed the diſeaſes of pregnancy, it is proper, before concluding the ſubject, we ſhould offer ſome obſervations on the treatment of pregnancy itſelf, independent of any diſeaſes that may occur. The treatment of women during geſtation has varied much at different times; at one period they have been conſidered as in a ſtate of diſeaſe, and abſtinence very ſtrictly enjoined. This was the fault of all the more early writers, while many of the moderns have adviſed, in their management, the oppoſite extreme. There is a proper medium at this time to be hit; and if real diſeaſe does not take place, a prediſpoſition to it, at leaſt, is always afforded. Hence, in thoſe who are naturally robuſt and young, a more ſparing diet will be found uſeful; while in thoſe whoſe conſtitution is more enfeebled, ſuch reſtriction cannot well be borne. This has been very ably pointed out by Mr. WHITE, who has gone ſo far as to inculcate in ſuch ſituations the uſe of cold-bathing and other tonics, as the moſt likely means to prevent abortion. Beſides diet, the exerciſe of women ſhould, during geſtation, bear a good deal of reſtriction; for we find, that women are more liable to abortion than any other animals, and this can only proceed from the erect poſture, by which the muſcles are retained in an uneaſy extended ſtate, ſo that any increaſed motion at this period muſt give them a

tendency to contract, while the incumbent weight itſelf poſſeſſes a natural inclination to deſcend. In the latter months of pregnancy this attention to reſt is particularly neceſſary, and a horizontal poſture ſhould be frequently indulged in. In the early months again, every circumſtance that tends in the leaſt to confine the ſituation of the expanding uterus by its preſſure becomes highly improper; hence tight lacing is frequently the cauſe, if not of abortion, at leaſt of ſeveral of the morbid affections which occur during pregnancy in that ſituation.

From what we already obſerved on the effects of pregnancy, the mind of women ſeems at this period remarkably weak and irritable; hence they are eaſily affected by the ſlighteſt cauſes; and, as their paſſions are liable to be excited, every thing that may tend to diſturb their repoſe ſhould be ſtudiouſly guarded againſt. On this account, ſo attentive are ſome nations to the ſtate of pregnant women, that no perſon is allowed even to knock loudly at the door, nor can the huſband be arreſted at this period.

BOOK II.

ABORTION.

I. FROM the complaints of pregnancy, increaſed to a violent degree, the ſudden application of any power producing a morbid determination to the uterus, ſo as to overcome its natural paſſive ſtate, a morbid affection of ſome of the parts eſtabliſhing the connexion between the organ and its contents, or from a natural irritability the organ itſelf poſſeſſes, its action is often excited at a premature period after conception, occaſioning the excluſion of its contents in their imperfect ſtate, termed Abortion.

II. The ſymptoms which diſtinguiſh this accident are,—the *occurrence* of *periodical pains*, attended with a *niſus*, or *preſſure downwards*, *preceded* by a *weight in the uterine region*, and *accompanied*, more or leſs, with *hæmorrhage*.

III. Two periods of pregnancy have been remarked as moſt liable to this accident; the former of which, extending from the eighth to the eleventh week, may be termed properly the period of abortion; the 2d, reaching from the fifth to the ſeventh month, the period of premature delivery.

IV. The former deſerves particular attention; for at this period the ſymptoms of pregnancy being not ſo decided as to eſtabliſh abſolutely its preſence, it often ariſes from the want of attention to herſelf on the part of the patient; or from the preſcriptions of the phyſician, for accidental, diſorders then common, not ſuſpecting this ſtate. All women who have already borne children conſider with juſtice this period of early geſtation as critical, while the occurrence of this accident, independent of its preſent effects, eſtabliſhes a habit difficult to be got the better of. The more early abortions are, the leſs danger there is from their conſequences. They are more liable to occur early in a firſt pregnancy than in any other, for the uterus is then leſs paſſive to its diſtenſion, while the patient herſelf, not ſuſpecting pregnancy, pays little regard to her real ſtate, and the too frequent indulgences of the huſband excite alſo the action of the uterus, naturally diſpoſed to throw off its contents, and thus abortion enſues.

V. The progreſs of excluſion in abortions, as well as their appearance, is very various, requiring a good deal of experience to form a juſt prognoſtic. One ſhould, indeed, be a little cautious on this head, for, though ſymptoms of abortion are preſent, they are not in every caſe attended with the expulſion of the ovum. A flooding may continue, even in conſiderable quantity, for ſome time, and yet the fœtus be carried to the term of geſtation. Nay, the prognoſis is more favourable where it is preceded by flooding than where no other ſymptoms but the occurrence of regular pains marks its approach: for, in the former, though the placenta be partly detached, yet the life of the ovum may ſtill remain; but in the latter the ovum has generally ſome time before

loſt its vitality, while the uterus, ceaſing to diſtend, or loſing that ſtate kept up by the ſtimulus of a living principle acting againſt it, is excited in order to expel its contents. In very torpid habits abortions are often retained before this takes place for months.

VI. But abortion at a very early period is often miſtaken for a mere increaſed flow of the menſes. This is very ready to happen in women who feel always pain on menſtruation. We judge however of abortion by the woman having miſſed the former uſual period, by ſome ſymptoms of geſtation having preceded, and by the preſent flow being irregular in its occurrence, and, if departing, returning ſoon. From the appearance, indeed, of what is paſt at this very early period, we may be deceived. The ovum is then ſo ſmall as to reſemble merely a clot of blood; and many women, eſpecially thoſe who are weak and relaxed, in whom the uterus does not poſſeſs much action, void the menſes commonly in the form of clots. The ſame happens to women on the departure of the menſes; when, if they are anxious to have children, they generally ſuppoſe they have miſcarried, from the appearance of the menſes voided in this form. Hence, from the difficulty of diſtinguiſhing the difference from external appearance, authors have confounded all very early abortions under the general appellation of Falſe Conceptions, or Moles.

VII. All abortions from an external cauſe are very quickly expelled: thoſe from an internal one are ſlower in their progreſs. Hence, from this circumſtance, authors have attempted to determine the nature of their cauſe. They obſerve, that in theſe caſes, where it ariſes from ſome fault exiſting in the habit of the patient, it

is generally ſlow; a ſlight appearance of blood firſt takes place, which goes off, or returns at intervals but in ſmall quantity, proportioned to the enlargement of the uterus. Stomach complaints next occur, ſuch as mark incipient pregnancy, continuing often for the ſpace of a month without any further morbid appearances. Pains, however, at laſt unexpectedly occur, and the appearance of blood returning in greater quantity than before, the os tincæ comes to be affected, and the ſtages of labour to proceed, when the fœtus is generally excluded in a putrid ſtate.

Where this accident frequently occurs, and always at a certain period, which the female in no pregnancy exceeds, it depends on ſome local affection of the uterus itſelf, independent of the habit;—this is more difficult to be remedied. But diſeaſes of the uterus leſs commonly occur during the period of child-bearing and conception, therefore is leſs frequently blaſted by rooted and conſtitutional, than by accidental and temporary cauſes. It is only, indeed, where improper means have been employed to accompliſh former deliveries, that local affections, acting as cauſes of abortion, are induced.

VIII. No cauſes produce ſo frequently abortion as paſſions of mind. The paſſions have been divided into the exciting and depreſſing. The former act immediately, occaſioning a rapid increaſe of circulation to the uterus, and looſening, by a rupture of ſome veſſels, the connection between it and the ovum. Hence abortion frequently follows anger in the ſpace of a few hours, or even a ſhorter period. The depreſſing paſſions are ſlower in their operation, and act only by increaſing, to a violent degree, the natural complaints of pregnancy. Thus grief, by increaſing that debility of ſtomach which

attends pregnancy, occaſions the efforts of reaching to be frequently ſo violent, as to terminate by this accident.

IX. Another cauſe of abortion enumerated, which is too little attended to, is irritability of the uterus itſelf. It chiefly occurs in nervous debilitated women, where the pelvis is well formed, and the uterus does not riſe ſufficiently, after conception, to be ſupported. In them, the ſlighteſt accident, occaſioning a ſudden preſſure of its contents againſt the os tincæ, is attended with this conſequence. Thus even the motion of a carriage, in ſome women, is ſufficient to produce abortion; ſlipping the ſtep of a ſtair, the moſt ſimple purgative medicine, and a thouſand other trifling cauſes, will be equally powerful; while we know that, in an oppoſite ſtate of the uterus, the moſt powerful means of confining the organ by tight lacing, and employing at the ſame time violent motion, as ſtepping ſuddenly from a height, or even the uſe of the moſt powerful draſtics, in thoſe who wiſh for abortion, is not attended with the deſired effect.

X. A variety of cauſes of abortion we find enumerated by authors, which are barely within the reach of probability. Thus Dr. SMELLIE mentions, that knots on the umbilical cord, or circumvolutions of it round the fœtus in early geſtation, by interrupting the circulation, and depriving it of nouriſhment, may occaſion the child's death, and conſequent abortion. But in no caſe, when theſe accidents occur, can the knots be ever ſo tight as to obſtruct the circulation; and the very interpoſition of the gelatinous matter itſelf, in the compoſition of the cord, ſeems by nature intended to prevent this effect.

In this opinion, Dr. SMELLIE is followed by ſeveral ſucceeding writers, who remark, as another cauſe of abortion, ſchirroſity of the placenta. Schirroſity, however, never happens at an early period; and where it is ſometimes diſcovered on its extraction after the delivery of the mature fœtus, the latter is equally ſtrong and vigorous as any other child, which plainly ſhews there has been no interruption of circulation.

XI. The appearance of abortions, on their expulſion, are very various. At times they are very regular, and anſwer, in their ſhape, to the natural triangular cavity of the uterus. In general, however, except at the very early periods, they are not excluded completely, but reſemble a thickened bag, the parts of which cannot be aſcertained. Frequently the fœtus and waters, with the lower part, is expelled; while the placenta, with the great bulk of the ovum, is retained. Till the ſixth week, in examining any ovum on its expulſion, you cannot perceive the ſmalleſt veſtige of the fœtus; and even then, from its delicacy, it is liable to be cruſhed in the paſſage, or diſſolved in the very fluids, when any preſſure is applied. Neither can you, from the time of its retention in the uterus, judge of its age; as when the abortion proceeds from an internal cauſe, it is frequently retained for months after the extinction of the circulation, till the uterus is excited to action for its expulſion. Where, indeed, pregnancy has been ſomewhat advanced, and the motion of the fœtus felt, we are determined in our opinion by the feelings of the patient herſelf, or the time when ſhe felt the motion of the fœtus ceaſe, previous to which there often takes place a violent ſtirring, which is never again renewed; and the

putrid ſtate in which it is expelled ſhews its having been retained ſome time.

XII. It has been a common obſervation, that a woman ſuffers more from one abortion than from ſeveral labours. This depends, chiefly, on the ſtate of the organ being unfavourable for the expulſion of its contents, and from the conſtitution therefore ſuffering by the continuance of its action before this is effected.

XIII. The difficulties ariſing from this ſtate of the organ may be reduced to three circumſtances:

1. The ſtate of the uterine neck and orifice, which poſſeſs much of their natural elongated form, and, at this period, have received little or no dilatation.

2. The ſmall force of the ovum itſelf, which does not poſſeſs ſufficient preſſure, compared with the bony cranium of the fœtus at full time.

3. The more firm attachment of the placenta, which, though ſeparated in part, adheres always more ſtrongly by ſome points than what it does where the connexion is weakened by the full extenſion of the uterus at the end of geſtation.

XIV. Having thus conſidered the hiſtory of abortion, it is proper to examine next its particular management; or,

1. What methods may be employed, where ſymptoms ariſe, to prevent its occurrence; and,

2. When this cannot be accompliſhed, what aſſiſtance is to be given to cut ſhort the proceſs by favouring expulſion.

XV. Wherever ſymptoms of abortion occur, the firſt ſtep is to attempt getting acquainted with the particular cauſe from which it ariſes. This is, however, at times difficult. Where it ariſes from paſſions of mind, the effect of domeſtic concerns, you can only judge from appearances: but an account of the previous health of the patient will, for the moſt part, determine it when from an external cauſe.

XVI. For the management, then, of abortion, two indications naturally preſent.

1. To ſubdue the increaſed action of the organ itſelf; and

2. To moderate any unuſual increaſe of determination to it, either originally exciting, or only increaſing this ſtate.

XVII. The former is immediately to be had recourſe to, and is affected by,

1. Poſture, that being preferred which occaſions the leaſt preſſure of the uterine contents, beginning to be detached on the os tincæ; and hence the breech ſhould be raiſed as high as poſſible, and the head, on the contrary, placed low.

2. And more powerfully by opiate glyſters; and, the inteſtines being previouſly cleared, they ſhould be exhibited in a full doſe at once, and repeated as indicated by an increaſe of ſymptoms.

XVIII. The ſecond indication or the leſſening the increaſed determination to the uterus is performed by diminiſhing the force of the general circulation, and by

weakening the action of the contiguous parts affecting the uterus.

XIX. The force of the general circulation is diminished by either blood-letting, which is most effectual, or exposure to cold air.

In the use of blood-letting, to prevent abortion, a good deal of judgment is required. The increase of circulation we find of two kinds, the former of which may be termed primary, being the effect of the state of the nervous system induced by the morbid cause, and producing an action of the uterus merely as a consequence. This generally attends abortions from an external cause: the other again is symptomatic, and arises from the action of the uterus itself. In the former case blood-letting early had recourse to, before the detachment of the ovum is considerable, has certainly prevented abortion, though unless early employed it cannot be effectual. In the latter this operation is highly improper, as the cause of abortion depends on the uterus itself; and therefore the success of general bleeding cannot be trusted; while, if abortion takes place, the debility induced by previous venesection, added to the attendant hæmorrhage, must prove very hurtful to the constitution of the patient; and hence in modern practice the use of venesection in abortion is become very much limited.

A free exposure to cold air is here particularly indicated by the hæmorrhage: the degree of it, however, must be regulated by the judgment of the practitioner.

XX. The weakening the action of contiguous parts af-

fecting the uterus forms the fecond part of this indication; and thofe parts are, chiefly, the abdominal mufcles, the bladder of urine, and rectum.

The action of the abdominal mufcles we endeavour to repreſs by cold applications, as cloths dipt in vinegar and water, attention to their relaxation by the poſture formerly enjoined, &c. while retention of urine is carefully avoided, and any neceſſity for going to ſtool hindered by the moſt abſtemious diet.

XXI. This, then, is the management to be enjoined to prevent abortion, when threatened; but this accident is not eaſily prevented when the ſymptoms of it once commence, and where they ſeem to increaſe by the pains, at firſt ſlight and irregular, becoming more periodical, ſtronger, and forcing, while the hæmorrhage at the ſame time diſplays itſelf in greater quantity. We next conſider, as there are little hopes of its prevention, what aſſiſtance can be given to facilitate its expulſion.

XXII. In caſes of early abortion, little can be done, and it is improper therefore to examine, as it conveys to the patient an idea of your giving ſome aſſiſtance towards the expulſion, which if ſhe does not find take place, and an increaſing pain and hæmorrhage after examination, it is apt to convey an unfavourable impreſſion of your abilities. All therefore that ſhould be done is to inſpect often, and carefully the cloths, as they come from the patient; for the fœtus being then ſo ſmall, comes frequently off in a clot of blood. The abatement of the flooding is no certain ſign of the ovum being paſt, as on deſcending to the os tincæ, it plugs it up; and the latter forming a reſiſtance, it is there detained, preventing the appearance of further hæmorrhage.

In theſe caſes, if the hæmorrhage ſtops, and the pains ſtill continue, we may expect the ovum in this ſituation, and by introducing the finger, and rolling it round the os tincæ, we may ſomewhat aſſiſt the dilatation; but violence muſt never at this period be employed.

XXIII. The ſize of the ovum about the third month, it was formerly remarked, equals a gooſe's egg; and in the progreſs to abortion, when the pains are regular, the os tincæ, on examination, may be felt ſomewhat open, and the ovum laying over it. If then the finger can be puſhed a little within the os tincæ, an attempt is to be made to thruſt it through the ſubſtance of the ovum; by which its fluid being evacuated, the bag will be leſſened, and the uterus thus allowed to contract more, by which the flooding will in part be leſſened. This is always to be attempted where the flooding is alarming; and even in this caſe, if no part of the ovum ſhould be felt, an attempt is to be made to dilate the os tincæ, by rolling the finger round it, and thus bring it within reach, when, piercing the bag, the diſcharge of its contents may take place.

XXIV. But inſtead of this practice, many authors adviſe, as the parts are ſo confined as to prevent the finger getting up ſufficiently high within the uterine orifice in order to give the propoſed aſſiſtance, that a pair of long forceps ſhould be introduced, guided by the finger within the orifice, when, graſping the preſenting part between their blades, it will be eaſily extracted.

But in the firſt place there is an objection to all inſtruments where they can poſſibly be avoided, and particularly at this early period, when the women themſelves have an idea of nature finiſhing the delivery completely herſelf.

2. You cannot truſt any inſtrument when it is beyond the reach of your finger, and within the cavity of the uterus, as you are uncertain of what particular part it takes hold; and,

3. In employing the finger for the extraction, you can in ſome meaſure imitate nature in the ſeparation of the ovum, and excite the action of the uterus itſelf to aſſiſt, while, in uſing an inſtrument; you are obliged to employ violence at once, without attention to any circumſtances of the ſituation of the ovum. The period when the preſent means recommended to aſſiſt the expulſion will be found neceſſary, is from the third to the end of the fifth month.

XXV. As geſtation becomes more advanced, and the different parts of the ovum completely evolved, though there is little difficulty attending the expulſion of the fœtus itſelf, yet the placenta being retained, the diſcharge and other ſymptoms of uneaſineſs are ſtill kept up. The uterus alſo does not then admit the hand to aſſiſt its delivery; nor, from the ſlenderneſs of the cord, can any force be employed to haſten it. This proceſs, therefore, is generally left to nature; and before it takes place, a conſiderable time often, ſeveral weeks, nay, upwards of a month, will at times paſs. This is more liable to occur where abortion is the effect of fever, as the general inflammatory ſtate of ſyſtem is in ſome degree communicated to the uterus, and a more firm adheſion than natural kept up. It happens alſo more frequently where abortion occurs in a firſt pregnancy, or where the woman is advanced in life, and the neck of the uterus poſſeſſes much rigidity. In theſe caſes the expulſion of the placenta takes place, either

1. By an increaſed effort of the uterus ſome time after

the expulsion of the fœtus; for on the delivery of the latter the discharge becomes generally greatly lessened, or assumes a serous appearance; and this increased effort of the uterus, which is marked by the occurrence of fresh pains and a considerable discharge, is often brought on by the pressure at stool; and hence the practice recommended, of exciting the uterine action by repeated glysters, though if not affectual, they are liable to increase the flooding for a time; or

2. By the tedious process of suppuration: and this event we judge of from the discharge acquiring an offensive smell, and before it fully takes place, or, when commencing, by its assuming the colour of coffee-grounds.

XXVI. In this last case very particular attention must be paid to the state of the discharge. From the debility induced by abortion, similar to the real child-bed state, there is always a tendency here to gangrene; and by neglect of cleanliness, or allowing the discharge to induce inflammation in the passage, this will certainly occur. On this account the vagina should be kept clean by frequent bathing, and the injection carried even, if possible, to the uterus, which will assist the separation of those pieces of placenta already in a state of actual suppuration. If, however, gangrene is about to commence, and this may be judged of from fixt pain, similar to that attending inflammation, and not of that pressing kind which marks the action of the uterus in delivery, the bark in every form is to be liberally employed, and joined to the former treatment, every mean of preventing the danger that threatens being had recourse to.

As soon as suppuration takes place, the discharge is

no longer troublesome, the inflamed state of the uterus sealing up the orifices of the vessels; and in any future delivery, where this termination of abortion has taken place, adhesions of the placenta may be always suspected.

XXVII. Every case of abortion endangers a repetition of it in succeeding gestations; and the management, therefore, of the accoucheur, so as to avoid it, becomes a necessary part of attention. The first step for this purpose is to ascertain the cause from which it proceeds. This, however, is often difficult; and, in spite of all your precautions, a woman will often continue to miscarry; so that you will be at a loss what plan to direct.

Where a woman miscarries, with great regularity, at iated periods, it is either owing to a constitutional fault, r a state of the organ unfavourable to distension.

With respect to the former, you may often trace it to a enereal taint. A slight use of mercury may therefore e tried, and it will often succeed.

With regard to the latter, we find in many women at the fundus uteri does not readily distend, which, producing a premature inclination of the uterine contents the neck, occasions the latter to be too easily dilated. this case, as soon as the patient is sensibly with child, should be constantly confined to bed till after the ortive period, and a spare diet in the interim recommended.

Where miscarriage occurs in the more robust and

plethoric, it is rather accidental; and if attention is paid to the patient in the next pregnancy, it will not likely recurn.

In women ſubject to menorrhogia, or fluor albus, in the unimpregnated ſtate, when miſcarriage occurs, the obviating relaxation in ſucceeding pregnancy is clearly pointed out; and it is in theſe caſes the effects of cold-bathing, as recommended by the experience of Mr. WHITE, have been found ſo ſucceſsful.

FLOODING.

Connected with abortion, and one of its leading ſymptoms, is *flooding* in the pregnant ſtate, or a diſcharge of blood from the uterus. From reviewing the ſentiments of authors, two ſpecies of it come to be eſtabliſhed; the one very rare, and correſponding both in regularity of period, and in quantity to the natural diſcharge; the other morbid, and marked by a train of ſymptoms, which point it out as a deviation from the healthy ſtate.

XXVIII. The former of theſe has been mentioned as occurring at the uſual period of menſtruation, for two or three times, or longer, after conception, without any ſymptoms which ſhew a tendency to abortion, or lead us to conſider it in a morbid light. Its occurrence is ſupported by many reſpectable authorities, though it is by no means frequent; nor can it proceed from the ſame ſource from which the menſes naturally flow. In every caſe, therefore, of hæmorrhage during pregnancy,

where a woman has formerly had children, and this ſpecies has not taken place, marking a certain peculiarity of conſtitution, it may be conſidered as morbid; or the probability is, by its obſerving the uſual period, that the woman has not conceived. Some authors have even endeavoured to diſtinguiſh theſe different ſpecies by the appearance of the diſcharge; for in common menſtruation the fluid appears thin, while in the morbid, on the contrary, it is thick, and poſſeſſes a ſtrong tendency to coagulate.

XXIX. The latter, which properly characteriſes pregnancy, is of a morbid nature, and is always conſidered by practitioners as an alarming ſymptom; for if not dangerous of itſelf, it at leaſt threatens a premature excluſion of the ovum, and conſequently deſtroys the effect of conception. From the ſlight attachment of the ovum to the uterus in the early months, it is not ſurpriſing that ſuch an effect ſhould take place from the ſlighteſt cauſes, when we conſider the quantity evacuated at every period, and the ſize of the veſſels from which it proceeds. The falſe chorion is the original connecting membrane between the uterus and its contents; and the leaſt ſeparation of this, by expoſing the orifices of the menſtrual veſſels, muſt be attended with ſuch a diſcharge.

XXX. Flooding ariſes from the ſame cauſes formerly numerated as inducing abortion; but the ſame cauſes, which are ſufficient to induce flooding, do not always occaſion abortion. The ſymptoms which attend it are pretty ſimilar to thoſe of abortion. It begins with ſlight rigour, attended with a ſenſe of laſſitude and pain, which is ſucceeded by a weight in the uterus and pu-

denda. The diſcharge itſelf ſoon appears,—moderate, for the moſt part, at firſt, and ſoon departing, but returning in a little time with increaſed violence.

XXXI. The great point, in all caſes of flooding, is for an accoucheur to be able to form a juſt prognoſis with reſpect to their nature. Rules will not inſtruct us in this. It is only experience, and the opportunity of frequently obſerving ſuch accidents in pregnancy, ſo as to be able to draw an opinion from compariſon. With a view however to this, floodings may be divided into two kinds; either,

1. With reſpect to their real danger, as threatening the life of the patient; or,

2. With regard to pregnancy alone, as endangering abortion.

XXXII. Till the fifth month, authors have aſſerted there is little danger from ſuch accidents in the pregnant ſtate. There have been inſtances, however, of flooding proving fatal at an earlier period; but, in general, we find the remark well founded; and in ſuch early caſes they muſt have been complicated with ſome morbid circumſtances not attended to, or on which their fatality more juſtly depended: even the practice formerly employed, of forcibly bringing off the placenta of early abortions by draſtics and other modes of irritation, muſt have very much contributed to ſuch a fatal effect.

But after the fifth month, every appearance of blood from the uterus is to be conſidered as attended with danger; and though departing, and apparently got the better of, it is very liable, on the ſlighteſt miſconduct,

to ſuffer a relapſe. Many women are ſubject to flooding in every pregnancy, and it marks in them a particular lax ſtate of the uterus, which generally proves fatal at laſt.

XXXIII. Whenever a flooding is attended with regular uterine pain, however ſlight, and the ſecond appearance of it, or the return after the firſt diſcharge, is not ſoon checked, it muſt, by detaching the decidua from the ſurface of the uterus, end at laſt in abortion; and this will be more certain if any filamentous membrane appears in the diſcharge. The alleviation, however, of this ſymptom we muſt aim at, and the ſame remedies are to be had recourſe to here as in caſe of abortion.

XXXIV. The ingenious Count de BUFFON has obſerved, that during pregnancy, though for the moſt part the menſes do not appear, yet the uſual effort is continued at each ſucceſſive period. To avoid flooding, therefore, particular attention ſhould be paid to the returns of this period, and this tendency of the uterus to action counteracted by reſt and other means.

Falſe Conception.

XXXV. Connected with flooding, and which uſed to be treated by the earlier writers at conſiderable length, is the mole or falſe conception.

Every ovum excluded in the early months, when the fœtus was yet ſo ſmall as hardly to bear detection, received this appellation, in which practitioners were

confirmed by its poſſeſſing the appearance of an irregular fleſhy maſs, being generally cruſhed more or leſs in its excluſion, ſo as greatly to disfigure its form. By a mole, however, is properly underſtood an extraneous body formed in the uterus, from the retention of the diſcharge peculiar to the organ, receiving a form ſimilar to the cavity containing it, but without any firmneſs of organiſation, or regular texture.

XXXVI. Such a diſeaſe is apt to occur on the departure of the menſes in thoſe women who are much ſubject to profluvia; for the action of the organ being impaired, and the diſcharge accumulating in its cavity, receives, from the preſſure of the uterus, a form ſomewhat reſembling in its appearance the organiſed ſtructure of the ovum.

XXXVII. No peculiar ſymptoms diſtinguiſh this diſeaſe from real pregnancy; and, in its treatment, manual aſſiſtance is only required when the exceſs of flooding, attending its evacuation, endangers the life of the patient.

MANCHESTER MEDICAL SOCIETY

BOOK III.

PARTURITION.

I. PARTURITION, or labour, is diſtinguiſhed by the following ſymptoms:—pain of the uterine region, recurring at intervals of uncertain duration, and producing always preſſure downwards: on examination, affecting more or leſs the os tincæ, with an increaſe of the pulſe, and diſorder of ſome functions during their continuance.

II. From this definition of labour, uterine pain appears its leading characteriſtic; but towards the term of geſtation every uneaſineſs in the hypogaſtric region is conſidered, by women themſelves, as the commencement of this ſtate: to form a proper judgment, therefore, certain circumſtances are to be remarked, conjoined with the ſymptoms above deſcribed.

III. The firſt of theſe is, that the term of geſtation be completely elapſed; for in this a very great regularity prevails; and without ſome extraordinary cauſe women are ſeldom delivered till this period arrives.

The ſecond is, the effect of this uterine pain on the organ itſelf, which is diſplayed,

1. By the orifice beginning to dilate, or feeling in a

ſoft ſlippery ſtate, while a thick mucus, tinged with blood, ouzes from the glands at the neck of its cavity.

2. By its nature being regular, periodical, and bringing into action the abdominal muſcles.

IV. The true diagnoſtics of labour-pains come to be, the ſtate of the uterine orifice as affected by their preſſure, their regularity, and intermiſſion.

V. As pain then forms the leading characteriſtic of labour, it muſt be conſidered, in the human ſubject, as a ſtate of diſeaſe, which is eſtabliſhed both by the feelings of the ſex themſelves under it, and alſo by its comparative difficulty with that of the brute creation.

VI. This difficulty has given occaſion to a diviſion of labour into certain claſſes or kinds, according to the morbid circumſtances with which it is complicated; and from obſervation of theſe, without adopting the plan of former authors, which we conſider as not ſufficiently extended, all labours we diſtinguiſh into five claſſes, by the names of the *natural*, *protracted*, *inſtrumental*, *manual*, and *anomalous*.

CLASS I.—*Of Natural Labour.*

VII. Natural labour, or thoſe of the firſt claſs, are marked by the following appearances:

The os tincæ feeling, on examination, ſoft and mucous, with its edges thin, and readily yielding to the in-

cumbent preſſure of the fœtal head, the pains recurring at regular intervals, gradually ſhortening, and the different containing parts forming no morbid reſiſtance to the paſſage of the preſenting part, while its duration ſeldom exceeds ſix hours.

VIII. But though labours, from the foregoing diviſion (VI.), differ materially from each other in the nature and variety of the circumſtances attending them, yet certain leading circumſtances we conſider as proper to every labour; and the aſcertaining theſe is eſſential, in order to underſtand the variety taking place. Such circumſtances we find occur in the progreſs or ſteps of a natural labour as it is moſt commonly formed; and the phenomena obſerved in it are to be ſtudied, as explaining the general doctrine of parturition.

IX. The appearances marking the progreſs of ſuch a labour are:—The patient firſt complains of ſome degree of cold or chilline ſs. Slight pain next ſucceeds from the ſmall of the back, and ſtrikes forwards towards the pubes, on each ſide, meeting as it were in a point, or down to the thighs. An increaſed diſcharge of mucus from the vagina next appears, ſtreaked commonly with a few drops of blood. The pains proceed, increaſing gradually in frequency and ſtrength, the intervals become ſhorter, and their preſſure downwards augments in proportion. The os uteri, on examination, is felt ſomewhat open, with its edges thin, ſoft, and yielding. The opening, at firſt ſmall, is hardly perceptible during the interval of pain, but ſoon extends; when, on the finger being introduced within it, there is felt a ſmall diſtended bag preſſing againſt the orifice. This body gradually enlarging at each pain, ſoon fills the os uteri, and continues its

preſſure againſt it for ſo long as the edges of the orifice give it a ſupport. At firſt, when ſmall, its figure is rather conical. As the orifice enlarges, and it comes to fill it, it becomes of a more rounded form. In the abſence of pain it feels ſoft and flaccid, and the uterine orifice, if poſſeſſing much elaſticity, becomes alſo, in the interval, a little more contracted. By the force of pain continuing, the dilatation of the orifice proceeds, ſo that its edges are obliterated; the coats of the body, or bag, being unſupported, at laſt give way, and the evacuation of the fluid contained, or at leaſt of the greater part, takes place. The quantity varies according to the portion contained in the uterus, and according, alſo, as the head accurately fills up the paſſage, preventing its exit. On the evacuation of the waters, the head, the preſenting part, is diſtinctly felt, and a ceſſation of pain, for a ſhort period, generally ſucceeds. The uterus then reſumes its contraction with increaſed force, proportioned to the greater reſiſtance from the bony cavity, which the head now fills, compared with the ſoft dilatable ſtate of the oſtincæ, and it comes, by accommodating itſelf in its paſſage to the difference of ſhape in the cavity of the pelvis, to be gradually propelled againſt the ſoft external parts. Its vertex then riſes from under the arch of the pubes, by which the reſiſtance from the pelvis, or bony cavity, is taken off, and the bulk of the head fills up the yielding parts that form the perinæum. In this manner, the head advancing in its progreſs with every pain, comes at laſt, on the yielding of the ſphincter, to be immediately expelled; and a ceſſation of pain then enſuing for a few ſeconds, the uterus reſumes its action, and the ſhoulders and body purſue the ſame direction with the head, when the child is completely delivered.

X. From this ſeries of appearances every labour may be properly divided in its progreſs into three ſtages, which we diſtinguiſh by the names of the period of *acceſſion*, *dilatation*, and *expulſion*.

In the courſe of each of theſe, various circumſtances ariſe, which deſerve to be more particularly mentioned.

XI. Under the firſt ſtage is included that period from the firſt ſymptoms of uneaſineſs till the os uteri is felt ſenſibly to dilate. In this ſtage a greater variety is obſervable in its ſymptoms than in the two others; and that both in different women, and in the ſame woman in different pregnancies. It generally commences with a chillineſs, or ſenſe of cold. In ſome this riſes to a regular cold fit, or trembling, ſimilar to what is felt in a tertian. In theſe caſes no pain enſues till the violence of the trembling abates. In others it is accompanied with cholic, diarrhœa, or ſome particular abdominal complaint, to which the patient is uſually ſubject, and of which ſhe experiences then a ſlight attack. Sometimes it begins alſo where the uterus falls low, about the end of geſtation, with a difficulty in the diſcharge of urine. Where this complaint then occurs, and the patient feels alſo a ſort of relaxation or freedom about the ſtomach, and parts adjacent, labour may always be conſidered as at hand.

XII. This ſtage ſeems a neceſſary prelude to the reſt of the operation; for, during it, the connection between the uterus and placenta is in part looſened. The veſſels of the decidua, connecting the ovum or bag to the uterus, are alſo gradually ruptured, and thus every part is prepared for the approaching excluſion; for, in every labour, we are to conſider, that thouſands of veſſels along

its ſurface are lacerated, and an evident deſtruction of organiſation produced, ſo that the organ is left in a raw inflamed ſtate, which, on any cauſe of irritation being applied after delivery, is liable to have a ſenſible effect on it. Hence there is, perhaps, more propriety, than modern practitioners ſeem now to think neceſſary, in the attention formerly paid to the ſtate of the diſcharge after delivery, and thoſe other circumſtances marking the particular diſpoſition of the organ at this period.

XIII. The duration of this ſtage is very uncertain: in moſt women it laſts only a few minutes. In ſome, particularly thoſe of a tenſe ſolid, and in a firſt labour, where the under part of the uterus is not ſo completely dilated as afterwards, it has been known to laſt ſeveral days; the pains at the ſame time being as ſtrong as thoſe of the ſecond ſtage, and bringing the uterus low into the pelvis, without having the ſmalleſt effect on the orifice, even the diſcharge from it not taking place.

XIV. The pains of this ſtage are marked in general more by a grinding, or conſtant ſenſe of uneaſineſs, than much preſſure. Hence the difficulty of diſtinguiſhing labour, during this period, till the ſecond ſtage properly commences.

Correſpondent to this ſtate of pain, the patient, during this ſtage, ſeems fretful, uneaſy, and cannot even expreſs her feelings. And the pulſe, from the apprehenſion of the impending danger, is frequently ſomewhat fluttered; but, when the ſecond ſtage takes place, the pulſe becomes fuller, and during the preſſure of the pains is conſiderably increaſed, acquiring often a good deal of ſharpneſs.

XV. Theſe are the chief circumſtances that mark the ſtage of acceſſion. The ſecond commences from the time that the pains, obſerving a regular recurrence, ſhew a ſenſible effect in dilating the uterine orifice, and terminate when its edges are obliterated, as marked by the rupture of the membranes: and we know it to have taken place by the waters beginning to form at the os uteri. The progreſs of dilatation is at firſt very ſlow. As the orifice enlarges, however, its edges become gradually thinner, and more yielding; and, in proportion alſo as it admits a greater proportion of the bag, or diſtending power, the contractions of the uterus are ſtronger. In this ſtage, and before the rupture of the membranes, the throes are never ſo painful as where the body of the child, on their evacuation, comes in contact with the ſurface of the uterus; which diſplays one intention of the waters, to prevent violence of pain at an early period of labour, before the fibres of the uterus are ſomewhat habituated to irritation. Hence we find inflammation ſucceed moſt commonly tedious labours, where they have been prematurely ruptured.

XVI. The rupture of the membranes marks the completion of the ſecond ſtage, in general, or takes place on the full dilatation of the uterine orifice. But, in certain inſtances, they continue entire even longer, and the whole ovum has been expelled at the full term of dilatation complete. This many authors have conſidered as the moſt natural ſtate of labour; but it is by no means to be wiſhed for, as flooding, the moſt alarming circumſtance in parturition, is thus endangered. What happens moſt frequently we are to conſider as always the moſt natural ſtate.

XVII. The nature of the pains themſelves have alſo an influence on the rupture of the membranes. Where they commence very ſtrong at firſt they are frequently prematurely ruptured; but where the labour is ſlow and gradual they continue long entire. When ruptured prematurely, the fluid continues to come off in ſmall quantity at every pain.

XVIII. Before their rupture the figure of the membranes is more or leſs rounded, anſwering to the circular form of the os tincæ; but, where any obſtruction to the dilatation of the os tincæ prevails, it aſſumes different ſhapes, which are conſidered by accoucheurs as giving evidence of the nature of the labour, or the particular part which preſents.

XIX. When the waters firſt form, the preſenting part comes to be retracted a little in the abſence of every pain. As the bag enlarges, however, it becomes gradually more fixt, and there is then more danger of rupturing them prematurely by touching. At this time a conſiderable pain is often felt behind, or about the top of the ſacrum, which inclines the patient, in the abſence of the real uterine throes, to bear downwards. This, however, ſhould be ſuppreſſed as much as poſſible, for it has no effect to forward the labour; and, if the latter ſhould be protracted, it tends to exhauſt the patient by fruitleſs exertions.

XX. As ſoon as the preſenting part becomes fixt the pains become ſtrong and ſettled; the former inquietudes of the patient depart; while, in the interval, the period of eaſe is more enjoyed, and the reſolution begins to be more confirmed. As this period advances,

of towards the termination of the ſtage, when the membranes are about to be ruptured, the uterine efforts are ſo uncommonly ſevere as to affect every part of the ſyſtem. The face becomes conſiderably flushed, the eyes are inflamed, and a general increaſed heat, and quickened circulation, viſibly take place. The rupture of the membranes alleviates this ſtate, and is perhaps neceſſary to prevent the danger of any morbid effects from its continuance.

XXI. After the rupture of the membranes, when the action of the uterus is reſumed, the third ſtage of labour, or what may be termed properly the ſtage of expulſion, commences. The period when this action is reſumed is very different in different caſes. In ſome it proceeds almoſt inſtantly, and the uterine action continues regular, without any intermiſſion, till the head is expelled: in others, and moſt commonly, there is a conſiderable ſuſpenſion of pain. But, whenever the membranes break, the head generally fills up, more or leſs, the vagina, and the uterine orifice is retracted beyond the feel. If the ſpace is not confined, it preſſes then, in a few minutes, againſt the perinæum, and the duration of the labour now depends very much on the reſiſtance from the external parts; for the two points of reſiſtance in this ſtage are, the protuberances of the iſchia, or ſphincter of the externum. As the perinæum yields, the tumour of the external parts begins to form, and the occiput, riſing from under the arch of the pubes, begins to ſhew itſelf during the preſſure of pain without the pudendum. When, however, the perinæum is rigid, or poſſeſſes much elaſticity, though apparently at the os externum, during the preſſure of pain, it becomes again retracted within the vagina on its departure; and in this

way the labour will often continue to proceed for ſeveral hours after the rupture of the membranes. This is one of the moſt painful ſtates that can well be imagined for the patient; but it is not in general attended with danger, as a laceration of the perinæum is thus prevented, an accident which often happens in a firſt labour, though natural. But the parts, though long preſt on by the head, are not very liable to ſuffer inflammation, unleſs when fretted by the attempts of the operator.

XXII. When the head, as it fills the vagina, in this third ſtage, is rather large, from its preſſure on the ſacrum, and nerves connected with it, cramps of the thigh ariſe. Theſe are troubleſome, but ſeldom particularly attended to by the accoucheur, any further than as they convey to him ſome idea of the progreſs of the labour. Soon after this alſo, from the ſame preſſure on the rectum, many women feel a deſire to go to ſtool. At this time, however, it is unſafe to indulge it, as the child may be born in this ſituation, which has frequently happened in the hands of midwives. It is very liable to occur in protracted labour, where the head, fixt on ſome projecting point, has remained many hours without any ſenſible advance; for, by this change of poſition, and the efforts then employed, if the obſtacle is overcome, it is at once expelled, when leaſt expected from appearances.

XXIII. When the labour has proceeded to this length, of affecting the thigh and rectum by the preſſure of the head, it comes ſoon to puſh out the external parts, and in a pain or two at moſt is expelled.

XXIV. The different changes in the poſture of the head, in its paſſage to expulſion, do not affect the re-

maining parts of the body; and time is therefore to be allowed for them to make the same necessary turns. This generally takes place in a few minutes; and by the occurrence of fresh pains, the child being completely delivered, the most important part of the labour is finished.

XXV. From the history of labour delivered (from IX. to XVIII.) we proceed to make some steps towards ascertaining its theory. As yet it has eluded the research of physiologists; or rather, all its circumstances have not been explained with satisfaction; and we shall not therefore pretend to offer an explanation that will universally apply.

XXVI. In entering upon this subject, it is proper to remark the comparative difficulty that takes place in human labour, contrasted with that of the brute creation. This arises from the particular posture of the human subject, and the manner in which the fœtus must be necessarily carried, during gestation; for here these very circumstances, which are essential to the safety of gestation, prove the very cause of impediment to the ease of delivery.

XXVII. These circumstances are a constant state of the parts concerned, opposing the descent of the uterine contents, and that either from

1. Their form; or,
2. Their natural action.

XXVIII. Thus, with regard to the former, we observe that the brim of the pelvis, from the expansion of the alæ of the innominata, affords a ready support to the uterus; while, by slipping forwards, it gives it a tenden-

cy rather to be thrown upon the pubes, than to enter the hollow of the pelvis; and the parts covering the abdomen yield at the ſame time readily to its preſſure directed this way, and are capable of ſuffering very great extenſion, without being brought into powerful action.

The capacity of the pelvis again has its axis not in a line with the external opening of the parts. It is furniſhed alſo with a number of projecting points, which, ſhould the uterus poſſeſs a tendency to gravitate downwards, would prevent, without the addition of other more powerful aſſiſtance, the occurrence of labour, while the natural proportions betwixt the pelvis and head are ſuch, that it can only enter it in one direction,—a circumſtance not remarkable in other animals, for that nice adjuſtment betwixt the dimenſions of the pelvis and head is in them no way remarkable. Hence, in human parturition, there prevails a variety of circumſtances, which render it a more complicated ſituation than in the quadruped.

XXIX. With reſpect to the ſecond circumſtance, or natural action of the parts, we find the very exit of the uterine contents oppoſed by the ſtructure, as well as mode of action of the organ itſelf.

The uterus is commonly divided into three parts, the body, the neck, and orifice.

From the body, or fundus, the fibres run in a longitudinal direction towards the neck, ſimilar to what occurs in the bladder of urine, and other hollow organs of a ſimilar ſtructure; and the neck therefore may be conſidered as a fixed point, to which, when contracting,

their action tends. The fibres of the neck, again, are placed tranſverſely, ſo that their action is in oppoſition to that of the fundus, which they naturally reſiſt; and the orifice is, in its ſtructure, ſimilar to the neck; being however more acutely ſenſible, ſo as, on any ſtrong irritation applied to it, to bring into action all the other parts.

XXX. To apply this, then, to explain the theory of labour, we obſerve that, during the whole of pregnancy, the uterus itſelf ſeems to poſſeſs a ſtate of diminiſhed irritability, remaining entirely paſſive; and this paſſive ſtate is only removed on its acquiring a certain degree of ultimate extenſion.

XXXI. That ſuch a ſtate prevails during pregnancy, appears,

1. From the ſymptoms immediately ſucceeding conception; as, lowneſs, languor, and want of venereal appetite.

2. From the impulſe of the menſes, &c. at their next period having ſo little effect for it, is not owing to the adheſion of its contents preventing the diſcharge, but that the ſtate of the uterus itſelf is ſomewhat altered, is confirmed by what was formerly remarked on its increaſe, in caſes of extra-uterine conception, even though its proper contents adhered to the cavity of the abdomen.

XXXII. After theſe obſervations, in order to elucidate the theory of labour, the peculiar manner in which the extenſion of the uterus takes place requires to be conſidered; and this we find to proceed in the following manner. The ſtructure of the fundus differs from that of the neck, in its fibres being naturally

more loose and extensive, while those of the neck possess a density of texture resisting extension, in proportion to its lessened size, compared with that of the fundus. From this structure the uterine contents are chiefly confined to the fundus, till the latter admitting no longer an easy extension, the fibres of the neck begin to be dilated. When the dilatation of the neck has acquired the same degree of extension with the fundus, proportioned to its size, an equal balance takes place between them, and an increased irritability, rising soon to a morbid degree, is induced over the whole of the uterus.

XXXIII. That such a state of morbid irritability then occurs, we prove,

1. From the symptoms attending the first stage of labour, previous to the real uterine action; and,

2. From the state of the contiguous parts in the last months of gestation.

XXXIV. That a balance of extension also happens between the different parts of the uterus, giving a superior power to the fundus, is confirmed by the ease of natural labour, compared with what occurs at a premature period; and the greater the degree of extension the cervix acquires, in order to bring it to this ballance with the fundus (for it takes place in a greater degree in some than in others), the sooner will the progress of labour be completed. Hence we conclude, that the state of the uterus itself, during the whole of gestation, forms even a resistance to the action of the contiguous assistant parts that are affected in delivery; and this being once taken away by the full extension of every part, labour comes to be un-

avoidably induced; and the cauſes which, during the period of geſtation, we have ſeen unequal to this effect, then readily excite it to action.

XXXV. The period of geſtation varies in different animals, and even ſome latitude prevails in individuals of the ſame ſpecies. The larger the animal is, the longer in general is the term of geſtation.—Women go nine complete months, or from 270 to 273 days.—This may conſidered as the medium; and the obſervations of Dr. Roderer on this ſubject eſtabliſhed it as the proper time when labour may be expected. It is not to be denied, however, that women often exceed, and alſo at times fall a little ſhort of this period. Thus many women are delivered in the eighth month, while the fœtus has all the appearance of having arrived at full time: others again have been known to go beyond the uſual term for ſome weeks; and women themſelves generally remark that females remain longer in the uterus than males. This variety we ſhould naturally expect to find, as the capacity of the uterus, and conſequently its progreſs of extenſion, muſt differ a little in different ſubjects.

XXXVI. This variety we do not find prevail in other animals, who are much more regular in their terms of delivery; and as in the human ſubject it may be made a bad uſe of in caſes of illicit commerce, accoucheurs have diſcouraged its being received as a general opinion. Law, however, has eſtabliſhed ſuch a latitude, that every child born twelve months from the death or abſence of the huſband is conſidered as legitimate. But to regulate our opinion on this head, it may be remarked, that in the ſame perſon a good deal of regularity prevails; and wherever a woman has had ſeveral children, and exceeds

at laſt the uſual term, from the period of reckoning, it may be ſuſpected ſhe was not with child ſo early as ſhe imagined.

XXXVII. The cauſe of this regularity of delivery at the end of the ninth month authors have been at a loſs to explain; but the uterus, whatever the ſtature of body may be, we find in moſt women pretty much of the ſame ſize; and its contents, which determine the period of excluſion, or its ultimate extenſion, are remarked to be as large in ſmall as in taller women. Even in caſes of twins the ſame rule will hold, for the fundus is the part that receives the exceſs of extenſion, and the cervix and lower part never receive their alterations till near the uſual time, as where there is but one: at leaſt a great deal of difference does not take place.

XXXVIII. The cauſes which, at the term of geſtation, by promoting the action of the uterus in its full extended ſtate, induce labour, may be referred to ſeveral heads, and conſiſt of—

1. The general unequal balance between the ſolids and fluids, diſtinguiſhing the whole of geſtation.

2. Violent tenſion of neighbouring parts, giving a tendency to action.

3. Increaſed ſtimulus of the uterine contents.

XXXIX. In accounting for labour, authors have not included all the cauſes to which it is referable. They have generally contented themſelves with one, and, while ſeveral were concerned, have admitted it only as acting in a primary manner. Hence they have attributed this operation to the action of the uterus at one time, and to

the efforts of the child at another. That ſeveral, however, are concerned, we have a ſufficient proof from the phenomena of labour deſcribed, and we ſhall conſider ſeparately each of them enumerated.

XL. With reſpect to the firſt, or the unequal balance between the ſolids and the fluids, conſtituting more particularly a uterine plethora, it has been ſtrongly inſiſted on by the Count de BUFFON; but he has circumſcribed its power of action to the recurrence of the menſtrual period alone. Though no blood be exhibited from the uterus during pregnancy, yet the cauſe of the menſes, he contends, is not deſtroyed, and a puſh is therefore made, as uſual, at each ſucceſſive period. This puſh occaſions a tendency in the uterus to contract, which it reſiſts till a certain degree of ultimate extenſion takes place, and then the menſtrual effort becomes ſufficient for inducing labour.

XLI. This theory Mr BUFFON ſupports,

1. By women themſelves being ſenſible of this menſtrual effort continuing during pregnancy.

2. From the variety in the term of geſtation in the human ſubject, which does not take place in other animals: and, as they have no menſes, he concludes labour in women muſt depend on this cauſe.

That the effort made at the menſtrual period may have ſome effect is not to be denied; but were it the ſole cauſe, labour ſhould never take place but at the time one of theſe periodic revolutions recurred; and if the effort excited by this periodic revolution was inſufficient, no action of the uterus ſhould recur, or labour commence, till the return of the next revolution; but we find labour occur at all times, independent of the menſtrual period.

The latter, therefore, cannot be the ſole cauſe of parturition, though, when coinciding with the time of labour, it will certainly have conſiderable effect in exciting the action of the uterus, and comes therefore to be properly introduced as a cauſe.

XLII. That the ſecond cauſe, or violent tenſion of neighbouring parts, has likewiſe ſome influence in inducing labour, is alſo proved from the accidental irritation of theſe parts during geſtation, frequently occaſioning its premature occurrence, and, from the power of their action, in aſſiſting the expulſion of the child. Nay, even the very firſt ſymptoms of labour are frequently an affection of the neighbouring parts, and though, perhaps, not of itſelf ſufficient to induce labour, yet, when concurring with the others ſpecified (XLII.), it muſt be attended with conſiderable effect.

XLIII. The third ſet of cauſes to which the occurrence of labour is to be referred, conſiſting of the increaſed ſtimulus of the uterine contents themſelves, has been the moſt general opinion received on this ſubject; and this increaſed ſtimulus ariſes from,

1. Decreaſe of the fluid, or liquor amnii, that leſſens the action of the fœtus upon the uterus; and,

2. Increaſe of motion on the part of the child.

XLIV. With reſpect to the firſt, we can perceive no other reaſon for the diminiſhed quantity of waters which takes place towards the term of geſtation.

The ſecond is a fact ſufficiently known to the mother herſelf,—the motions of the fœtus in the laſt months becoming generally ſo ſtrong as to give a good deal of un-

eaſineſs, and threatening, according to her own idea, to rupture the ſides of the abdomen. The cauſe of this increaſed action of the fœtus authors have endeavoured to explain in a variety of ways, ſome conſidering it to depend on the diminiſhed capacity of the uterus, which, confining its ſituation, obliges it to exert every effort to break its priſon; while others contend, that the weight of the fœtus, now inſupportable to the uterus, occaſions the latter opening to be diſcharged of its burden.

But, in oppoſition to theſe opinions, we may remark, that the uterus is never completely full; that, when loaded with two, it is more extended than with one; that the weight and ſize of children of eight months ſometimes exceeds that of nine; and, as the period of delivery in all theſe caſes is pretty nearly the ſame, it cannot ariſe from theſe cauſes.

XLV. Forſaking, then, theſe opinions, an attempt has next been made to account for it on the principle of certain functions being about this time neceſſary to be performed; and that, by a law of its economy, or a natural inſtinct, the motions of the fœtus are exerted to free itſelf from its ſituation. Thus GALEN pretends that the fœtus continues in the uterus till it is able to take nouriſhment by the mouth; and that the want of proper food makes it reſtleſs, and anxious to eſcape. On the ſame principle another party, who ſuppoſe the fœtus originally nouriſhed by the mouth, contend, that in proceſs of time the liquor amnii is ſo contaminated as to be unfit for the farther purpoſes of nouriſhment; and that the deſire for the latter occaſions the action of the fœtus to be excited. But theſe reaſons, when duly conſidered, are by no means ſatisfactory: for, were this

the caſe, the more weakly children ſhould remain longer in the uterus than the more robuſt, and nutriment we find not the firſt want of the child after birth. It often remains for ſome days before being capable of receiving it. Other anatomiſts have, with equal probability, referred this increaſed motion of the child towards the turn of geſtation to a deſire of being refreſhed by reſpiration. As reſpiration, however, does not ſeem neceſſary to the fœtal life, why ſuppoſe it ſenſible of its want; and if the placenta is capable for ſo long of producing a depuration of the fœtal maſs, ſome alteration muſt take place in it, and which we cannot perceive, by which it is incapable of longer executing this office equally well as before?

XLVI. An opinion ſuggeſted by DRELINCOURT may be alſo mentioned, that the collection of the meconium in the inteſtines produces, from its acrimony, an irritation, which, rendering the child uneaſy, occaſions its motions to be excited, that, leaving its ſituation, it may be freed of this collection in the inteſtines. But were this actually ſo, why may not the excrement be voided in the uterus? We know that any accidental preſſure on the abdomen of the child in the uterus, where we have occaſion to turn in manual or preternatural caſes, forces the excrement at times to be paſt. Where a child dies in utero, the meconium too is frequently voided in its laſt ſtruggles; and the appearance of it therefore, on the rupture of the membranes, is conſidered as one proof of the death of the child. Hence, if the child really felt an irritation from it, it could be eaſily paſt in the uterus.

XLVII. From examining the above theories, we are led

to conclude that authors have taken too contracted a view of the ſubject; and, without a deſire for the performance of any one particular function, we are to conſider this increaſed motion of the fœtus as depending on the fœtal life, being ſo far completed that its ſyſtem is capable now of depending on itſelf; and, conſcious of its vigour, an attempt is made by the fœtus, to exerciſe its different members as far as in its power, which in this irritable extended ſtate of the uterus muſt certainly have ſome effect in exciting its action. But to ſuppoſe this motion of the fœtus is of itſelf capable of inducing labour is falſe; for we know that a dead child is delivered at the uſual time with as much eaſe as a living one; though, misled by this theory, practitioners for long conſidered a dead child as only capable of being delivered by manual aſſiſtance. But though the fœtus, we have endeavoured to ſhew, is not the original cauſe of labour, yet there can be no doubt it has great effect in its progreſs in a mechanical way, ſo ſoon as the head comes to be engaged in the os uteri, and to act upon its irritable ſurface.

XLVIII. Having thus enumerated the ſeveral cauſes on which we conceive labour to depend, the theory to be formed of its proceſs is ſimply this:

The united power of certain ſtimuli mentioned (from XXXVIII. to XLVII.), applied to the uterus in a ſtate of morbid irritability, the effect of extreme extenſion, excites the action of its fundus, which overcomes the natural reſiſtance of the neck in conſequence of the latter having now received a degree of extenſion, putting them in balance; and the contents of the uterus are thus determined downwards, by which the orifice

begins to dilate. To render this dilatation more expeditious, the fluid ſurrounding the fœtus is firſt puſhed down in a certain quantity, and, from its elaſticity, admitted into the orifice, however ſmall,—thus acting as a wedge before the head can poſſibly enter, while its irritation being ſlight, the orifice is not thrown into thoſe ſpaſms which frequently take place when it is irritable, and the waters break early, ſo that the head is applied at once againſt it.

XLIX. The action of the uterus in this proceſs we find temporary, or continues only for a time, and then ſuffers an intermiſſion. From the uneaſineſs attending it, it has received the appellation of labour pain, and authors have diſtinguiſhed it into three ſpecies, which they term true, falſe, and mixed.

By the firſt, is underſtood that kind of pain which ſhews a ſenſible effect in bringing forward the fœtus to delivery.

By the ſecond, that which affects only the contiguous parts, and does not at all excite the action of the uterus.

By the third, that which affects both the uterus and contiguous parts at the ſame time; though its effect on the former is not equal to the force its ſeems apparently to exert.

L. This pain, or temporary exertion of the uterus, may be explained on the principles of muſcular action; for every muſcle, after being a certain time in action, remits or becomes inſenſible to the ſame degree of ſtimulus. Hence we find the pains in their progreſs naturally increaſe in violence; for the preſenting part, advancing gradually, produces a greater irritation on

the extremity of the muſcle; and hence alſo the intervals of pain are at firſt more diſtant, and become gradually ſhortened as the labour advances. The action of all hollow muſcles too, when once excited, we find ſtronger than any other, as not being fixed to any part, and conſequently having no limits to their contraction, which is even one reaſon for conſidering labour as depending ſo much on the action of the organ itſelf,—the cauſes which act during pregnancy, in oppoſing its contraction, being taken away.

LI. At firſt the efforts of the uterus are perhaps in ſome degree under the command of the will, and we even find that at this time they may be partly ſuſpended, of which we have a ſtrong proof when called to a patient, that they will often leave her entirely on our appearance, though regular and frequent before; but, when the uterine action is once fully eſtabliſhed and labour advanced, they are then involuntary, and cannot be ſuſpended, which we find particularly the caſe in the laſt efforts, when, from their violence, the rupture of ſome of the parts frequently enſues.

LII. From theſe obſervations, then, on the action of the uterus, though its muſcular ſubſtance has been conſidered by authors as leſs apparent, yet its power as a muſcle is in labour ſufficiently eſtabliſhed; and, if it is not muſcular, it then ſhews that the power of contraction is not excluſively confined to that kind of organiſation.

LIII. But though delivery depends chiefly on the action of the uterus itſelf, yet certain powers, termed aſſiſtant, are alſo conjoined with it; and theſe are the abdominal muſcles, and alſo thoſe of the extremities.

LIV. With reſpect to the firſt, it appears that the abdominal muſcles and adjacent parts have a conſiderable effect in aſſiſting delivery, as a proof of which we find that diſtorted women, in whom the thorax and abdomen are more contracted, and in whom of courſe the action of theſe parts is more imperfect, independent of the ſtate of the pelvis, have generally protracted labours. Hence the propriety of voluntary ſtraining on the part of the patient to aſſiſt delivery, though, at the ſame time, it ſhould never be carried too far, and only employed when the primary action of the uterus co-operates.

In regard to the ſecond again, or the muſcles of the extremities, when put in action, they fix thoſe parts of the body to which the former are connected, and render their operation more extenſive. Hence the advantage of particular poſitions, which authors have directed, as facilitating delivery.

LV. Having thus detailed the progreſs of natural labour, and offered ſome hints towards aſcertaining its theory, its management in the laſt place claims our attention.

The chief point to be obſerved here is, that natural labour is that ſpecies which is performed by the natural powers alone; and of courſe that the aſſiſtance of the accoucheur to forward it is at leaſt unneceſſary, if not injurious. The great merit of an accoucheur in theſe caſes is,

1. His ſhewing a ſedulous attention to favour the natural efforts, by directing the proper management of the patient, ſo as to prevent harm being done by female prejudices; and,

2. His displaying his knowledge, by forming a just prognosis of the duration of the labour; a subject on which he is commonly interrogated, both by the patient and her attendants.

LVI. The former of these he endeavours to execute,

1. By directing the proper position for delivery.

2. Obviating any morbid symptom, which arises during the progress of labour.

3. Preventing over exertion on the part of the patient; and,

4. Where languid, assisting the natural efforts by strengthening the general system.

LVII. With respect to the first, the custom of different countries has occasioned a great variety to be observed; and to point out the proper one, it is necessary to consider what is required for this purpose.

The first thing is certainly the ease of the patient; and,

The second, that the uterine efforts be no way counteracted.

LVIII. Both these purposes are answered by the position now most generally employed, which is lying in bed on the left side; and this position, in the present class of labours, is most agreeable for delivery, most convenient for the operator, is easiest for the patient where any morbid circumstances occur, and does not, by any pressure on the soft parts receiving dilatation, prevent their extension as takes place in the back position.

LIX. Before the patient is directed to any particular posture, and, indeed, even confined to bed, the progress

of the labour ſhould be pretty far advanced, and the ſecond ſtage almoſt completed.

There is very little danger of being too late with this, as the feelings of the patient will incline her to retire to bed much earlier than perhaps is neceſſary. During the firſt ſtage of labour, it is improper to confine the patient to any one poſition; for its duration being uncertain, the time will paſs more eaſily, and it is only from the period that women are confined to bed they judge of the ſlowneſs of their labour. There can indeed be no proper time fixed when the patient ſhould be put to bed, as it muſt be determined entirely by the circumſtances of the labour, and this the accoucheur himſelf will be beſt able to decide.

LX. During the progreſs of every labour, even the moſt eaſy, from its effects on the ſyſtem, certain morbid ſymptoms ariſe, which require attention, and which we muſt endeavour to palliate.

LXI. One of the moſt frequent of theſe is *ſickneſs*. With many women it commences with labour, and continues during the whole progreſs of it. With others it only begins when the labour is pretty far advanced, and the os tincæ fully dilated. From the exertions of vomiting it occaſions, it proves an aſſiſtant to the pains where they are weak. But where no vomiting occurs, and the ſickneſs is very violent, it occaſions, frequently, a ſuſpenſion of labour to take place. We can do very little to it, except waſhing out the ſtomach, for the cordials, which are commonly in this caſe given, tend much to increaſe it.

LXII. *Diarrhœa* is likewiſe a uſual attendant of labour. In ſome it begins regularly, as formerly obſerved (XI.), with a degree of cholic. In others it takes place where the head is ſo far advanced as to ſtretch the perinæum, and of courſe dilate the rectum. In this laſt caſe it requires no attention; but in the former it may be alleviated by an opiate glyſter.

LXIII. *Suppreſſion of urine* is alſo a complaint that occurs in the commencement of labour. It requires then particular care; for, by allowing it to proceed till the head is engaged in the pelvis, from its compreſſion on the neck of the bladder, the introduction of the catheter becomes very difficult, often impoſſible; and where the ſuppreſſion continues above twelve hours, and cannot be relieved, delivery muſt be had recourſe to with as much expedition as poſſible, and that by the moſt gentle and leaſt coercive method. Thus a labour, ſtrictly natural, and which might have terminated eaſily, is, by this ſymptom, often rendered one of the moſt troubleſome, and which ſometimes ends fatally; for, independent of the quantity of urine accumulated, which threatens the rupture of the bladder, and excites its action, the pains of labour come, from this irritation, to be totally ſuſpended.

LXIV. *Coſtiveneſs* is a complaint natural to pregnancy; and where allowed to proceed, is ſometimes troubleſome in labour. On this account, a glyſter ſhould always be exhibited at its commencement; for, by clearing the bowels at this period, it give leſs trouble for ſome time after delivery.

LXV. *Cramp* is alſo very common during the pro-

greſs of parturition. When in the belly, it is moſt ſevere, and requires to be alleviated by the uſe of opiates; and, if the membranes are not broken by their rupture, allowing the uterus to contract, and thus leſſening compreſſion, the complaint is relieved. Cramp of the thigh again is leſs to be regarded. It generally comes on when the labour is pretty far advanced, and prevails chiefly in one thigh.

LXVI. *Flooding* likewiſe frequently occurs in labour, even in its moſt natural ſtate. It uſually takes place where the labour is tedious, or where the patient is overheated and uſes much exertion. If moderate, little is to be done but attending to the ſtate of the patient, and its effects upon her. If ſevere, it is then alarming, and requires delivery to be expedited as quickly as poſſible, in the manner pointed out in flooding caſes.

LXVII. Next to obviating the complaints of labour, now deſcribed, *preventing over exertion* on the part of the patient, as inducing theſe, is to be ſtrictly recommended. This moſt commonly takes place in a firſt labour; for the patient, on the leaſt irritation, ſtrains with conſiderable force, which, wanting the co-operation of the uterine action, has very little effect. It often does harm, by occaſioning a degree of fever, marked by a general increaſed action of the ſyſtem and intenſe heat within the vagina; ſo that bleeding, to prevent inflammation, becomes often neceſſary.

LXVIII. The oppoſite alſo of this ſtate, or a *torpor of the ſyſtem*, by which the natural efforts are not properly aſſiſted, occurs at times, though leſs frequent. When met with, it conſtitutes a ſpecies of natural la-

bour, termed by the women themſelves a ſleepy labour, the patient inclining to doze during the whole of it, and being hardly waked, even by the recurrence of pain. In this caſe, a moderate uſe of ſtimulants may be proper, though in general the uſe of cordials is not much indicated in parturition.

LXIX. Theſe form the firſt circumſtances that demand the attention of the accoucheur in conducting natural labour. The next, or his opinion with reſpect to its duration, is a more difficult taſk to execute. No opinion, indeed, can be formed, with certainty, on this head, as it is connected with ſuch a variety of circumſtances that may retard its progreſs; but, in order to form a probable judgment for our own direction, we compare the extent of dilatation of the uterine orifice, in a given time, with the ſtrength of the pains. The dilatation we obſerve at firſt ſlow, but it is otherwiſe when it gains a certain extent; and if it requires ſix hours to dilate the os uteri one half, it will not take above one hour, where it admits a portion of the head, to dilate the reſt. When the head advances within the vagina, the prognoſis is more uncertain. The reſiſtance which the ſoft parts may give may occaſion its being detained, even ſome hours, at the os externum, the ſphincter of which, if entire, may be conſidered as another orifice, to be overcome like the os tincæ.

LXX. Since natural labour is accompliſhed by the efforts of the patient alone, it becomes proper to aſcertain what interference is neceſſary on the part of the accoucheur at all, during its progreſs.

Till the head is advanced ſo far as to preſs againſt the perinæum, even touching is unneceſſary, except to aſcertain the preſentation, which is generally done ſoon after the commencement of labour. Too frequent touching is attended with bad effects; for,

1. If not very cautious, you are liable to rupture the membranes prematurely; and the more ſo, if a ſmall portion is protruded beyond the os uteri, which is ſometimes the caſe while the latter is very little dilated.

2. By ſuch interference the parts muſt unavoidably be fretted, which we find particularly the caſe where midwives attend; and,

3. By touching, the patient has generally an idea of your conveying aſſiſtance, while, if the labour is not ſoon terminated, ſhe cannot entertain the moſt favourable opinion of its ſucceſs.

LXXI. When the head begins to preſs againſt the perinæum, has been mentioned by authors as the proper time for placing the patient in the poſition intended for delivery. This, however, though a general rule, is by no means to be ſtrictly adhered to, but muſt be regulated by the former circumſtances of the labour, with reſpect to its duration and the apparent ſtate of the external parts, or the reſiſtance they may form to its expulſion. The confinement to bed at this period of labour proceeded on the practice inculcated by many eminent accoucheurs, that it was neceſſary to ſupport the perinæum by the preſſure of the hand, to prevent its laceration. But by this practice one of two circumſtances muſt take place. If the preſſure is ſo ſtrong as to prove effectual, it muſt counteract entirely the influence of the pains, as the dilatation of the ſoft parts, when the head has advanced ſo far, is then only want-

ing to affect the delivery. But, even independent of this, such pressure occasions it to be violently bruised, and if so slight as not to induce this, it may indeed shew an attention to the patient, but can be of no service in easing the pain of delivery. It may be also affirmed, that laceration of the perinæum has as often taken place where this pressure was applied, as without it; for the violence of the last pains is generally so strong, that without a degree of pressure, which no practitioner will think safe to employ, they cannot be counteracted.

LXXII. The advance of the labour to this length may be even judged of by the nature of the pains themselves, or their effects on the patient: for, in the second stage, the force of the presenting part is counteracted by the interposition of the waters, which act as a medium, and blunt its effects against the sensible uterine orifice. Hence the pains of this stage, where the membranes continue entire, are generally bearable. In the commencement of the third stage, again, when the uterine orifice is retracted, and the waters break, the force of the presenting part is directed against the bony cavity, and the pains here are not more severe than in the former; but towards its termination, when the head descends against the perinæum, the pains become so strong and severe, as to differ in their effects on the patient, from any of the former, becoming in some measure intolerable, and obliging her to cry out.

LXXIII. When the head has pretty nearly filled the perinæum, the tumour of the external parts begins to form, and is at last expelled. When expelled, the face generally turns to one side, directed by the position of the remaining parts.

LXXIV. On the protruſion of the head, practitioners generally imagined that the reſt of the delivery belonged entirely to them. The head, therefore, was taken hold of, with a hand on each ſide, and violently pulled forward, ſo as to diſentangle the reſt of the body. But by this practice the patient was ſubjected to many inconveniences, which even affected her recovery. The reaſon aſſigned for this method was, the danger the child ſuffered from compreſſion of the cord by this delay: but till part of the body is protruded, the cord can never ſuffer compreſſion, unleſs it is circumvoluted round the neck of the child, and, in this caſe, ſuch practice may be allowed.

LXXV. Mr. White was the firſt, who, from an attention to the natural efforts, pointed out the propriety of truſting alſo this part to the ſame power; for, after the protruſion of the head, a ſhort reſpite taking place, the pains are again renewed, and the ſhoulders, obſerving the dimenſions of the pelvis, enter its brim towards the ilia, and deſcend, in this poſition, till its capacity is changed by the protruſion of the iſchia, when turning towards the pubes and ſacrum, as giving the moſt enlarged ſpace, they are expelled in this direction. A neglect of this practice occaſioned the expulſion of the placenta to be generally more difficult, and the after-pains alſo to be more ſevere; for if the operator pull forth the child, the laſt efforts of the uterus are prevented, which have the chief effect in ſeparating the placenta, and the ſoft ſubſtance of the latter does not afterwards give it ſuch a ſtimulus as to excite anew its ready contraction. In the ſame way, by the want of theſe laſt exertions of the uterus, ſmall coagula are retained in the extremities of its veſſels, which are expel-

led at laſt by the action of the uterus, marked by what are termed after-pains, and theſe are rendered uncommonly ſevere from their not being expelled during the previous efforts of labour itſelf.

LXXVI. When the child is expelled, it is laid upon its ſide, with its back towards the mother, and the next ſtep that remains is to ſeparate its connection with her by dividing the umbilical cord. With reſpect to the proper time, however, of doing this, different opinions prevail. It was formerly the cuſtom, and is ſtill too much employed, to make this ſeparation immediately, or, at leaſt, as ſoon as the child had given any ſigns of life. But, in paſſing from the fœtal to the perfect animal ſtate, the neceſſary changes in the circulation require ſome time. The lungs of the child, when at firſt diſtended, are imperfect in their functions; and, by allowing the connection with the placenta for ſome time to remain, the latter, from its ſuppoſed ſecondary office of ſupplying the uſe of the lungs in the fœtal ſtate, will be an aſſiſtant at this time to the lungs till their proper action is eſtabliſhed. Hence the propriety of a practice employed by many accoucheurs in caſes of ſtill birth, the immerſing the placenta in warm water, to allow its circulation, from its effects on the fœtus, to continue.

LXXVII. For theſe reaſons ſpecified, till the circulation in the umbilical cord is ſtopped, no diviſion ſhould take place. When that happens, a ligature is to be paſt on the cord, about two fingers breadth from the umbilicus of the child, and tightened ſo as to make a proper compreſſion on the veſſels, though there will be leſs danger of any hæmorrhage if this practice is obſerved

of not dividing the cord till the circulation in the child is once eſtabliſhed. The cord may be then cut, and the child removed; but many authors adviſe, previous to this, and it is by far the moſt cleanly method, that a ſecond ligature ſhould be paſt on the cord, about an inch diſtant from the former, and that the diviſions ſhould be made between them, by which the contents of the placenta will be prevented flowing into the bed; and, in caſe alſo there is a ſecond child, which you do not at firſt diſcover, no hæmorrhage will enſue to prove hurtful to it.

LXXVIII. Dr. SMELLIE adviſes but one ligature, by which the placenta, he ſays, unloaded of its blood, will ſhrink in ſize, and aſſiſt the ſeparation; but it is not the placenta that occaſions this ſeparation, it is the uterus itſelf. Hence a ſmall diminution of its bulk can have little effect in this way; nay, the larger the placenta, the more readily will it ſeparate, by giving greater irritation to the uterus, and exciting its more powerful contraction; though it may, perhaps, unleſs care is taken in bringing it along, excite a ſpaſm of the os tincæ. It is, perhaps, immaterial which practice is purſued.

LXXIX. Having thus conſidered the proper aſſiſtance natural labour requires, it may be proper next to offer a few obſervations on the treatment of the patient during its progreſs.

In general, during the time of labour, digeſtion does not proceed as uſual. Similar to acute diſeaſe of ſome principal organ, the other functions are either entirely ſuſpended, or greatly weakened, during its continuance; or the attention of the ſyſtem is as it were wholly taken

up with the preſent ſtate. On this account, with moſt patients, little ſolid food will be neceſſary; and, if any way irritable, the ſtomach is even apt to reject it.

LXXX. In delicate habits, however, at times, this general rule muſt be infringed, as the exertions employed require ſome ſtimulus to continue them, and the patient is apt to fall low, and to become diſpirited. In the choice of ſtimulants, many reſtrictions have been enjoined by accoucheurs, from their endangering flooding after delivery. It is to be doubted, however, if flooding after delivery is ever endangered by this cauſe. It moſt commonly ariſes from a ſtate of the organ itſelf, unconnected with the general circulation. Whatever accelerates the general circulation muſt have an influence on the ſolids in a primary manner, while the effect of any increaſed action on the ſolids muſt give a tendency to contraction, the very thing in ſuch an occurrence wanted.

LXXXI. Of labour, the proportion belonging to this claſs is 99 out of 100. The improvement in their management is juſtly due to modern practitioners. The firſt æra of it was in the beginning of the 15th century, when the introduction of the term laborious, as a diviſion of this claſs rather than a ſeparate one, took place. From that period its limits have been gradually extended. Artificial aſſiſtance has been leſs frequently employed; and its perfection ſeems at laſt to be almoſt completed, by the application of the ſame rules of conduct in the delivery of the reſt of the body as had been formerly confined entirely to the head.

LXXXII. The expulſion of the child is immediately ſucceeded by the evacuation of the remaining por-

tion of the water retained after the rupture of the membranes, in conſequence of the head, by its filling the paſſage, confining them. The contraction of the uterus next ſucceeds, and occaſions the ſeparation of the placenta, which has already almoſt entirely taken place during the laſt efforts of the organ to expel the body of the child; and this ſeparation is attended by a diſcharge of blood from that part of the ſurface of the uterus formerly occupied by the ſeparated portion of the placenta. This continues till the contraction of the uterus proceeds ſo far that the ſituation of the placenta comes to be confined. The organ then reſumes its contraction in a ſlight degree, proportioned to the ſize of the body, the ſoftneſs of its texture conveying leſs irritation, and the ſtate of the organ itſelf not being ſo eaſily acted on as during the progreſs of labour; and by this contraction it comes at laſt to be gradually expelled,—the pains that effect this reſembling thoſe which diſtinguiſh the firſt ſtage of labour.

LXXXIII. The expulſion of the placenta is immediately ſucceeded by the diſcharge of any remaining exceſs of fluid in the veſſels of the uterus, when the organ is reduced ſomewhat to its natural ſtate,—feeling to the hand, applied on the os pubis, as a ſmall hard round tumour, and leaving the abdomen, and ſituation it formerly occupied, in a flaccid ſtate.

LXXXIV. Such is the uſual proceſs by which the delivery of the placenta is effected. It becomes next proper to conſider,

1. How far the interference of the accoucheur is at all times neceſſary in aſſiſting it; or,

2. What circumſtances determine him, in particular

caſes, to anticipate the natural efforts, and, by manual aid, perform it entirely.

LXXXV. On no ſubject of practical midwifery have accoucheurs differed more than on this of the management of the placenta in natural labour. The idea of the immediate contraction of the uterine orifice preventing its exit, determined them for long on its inſtant extraction; and, as its complete ſeparation was thus prevented by forcibly tearing it from the ſurface of the uterus, the mouths of large veſſels were expoſed in their dilated ſtate, which produced of courſe a violent increaſe of hæmorrhage; and the natural contractions of the uterus being counteracted from this violence employed, often produced on it an atonic ſtate, by which this hæmorrhage proved fatal. But even where this termination did not take place, from the fibres of the uterus poſſeſſing perhaps more elaſticity than uſual, inflammation, and afterwards ſuppuration of that ſurface of the organ occupied by the placenta, frequently happened, and the patient was thus ſubjected, from the too officious aſſiſtance of the operator, to all the conſequences of a painful and tedious recovery. Independent of this, alſo, ſuch a practice is particularly reprobated by the very great and unneceſſary pain the patient muſt unavoidably experience, who, from the violence of the former parturition, compared with the preſent interval of eaſe ſucceeding the expulſion of the child, expects no ſuch renewal of the former agony.

LXXXVI. This practice then was ſucceeded by an oppoſite procedure, or an opinion that the natural efforts ſhould at all times be truſted with the expulſion of the placenta, and that the hand of the operator ſhould in

no caſe be introduced into the uterus for the purpoſe of its extraction. This opinion was ſtrongly inculcated by Ruysch, to which he was led by the pretended diſcovery of the muſculus orbicularis at the fundus uteri, the uſe of which he conſidered as intended in a ſpecial manner for the expulſion of the placenta. Though leſs dangerous than the former on the whole, this practice was ſtill, in particular ſituations, attended with fatal effects; and its retention, till actual ſymptoms of putrefaction occurred, was the conſequence of an unlimited confidence in the efforts of nature. Truth, however, is ſeldom in extremes; and Mr. Puzos was the firſt author who pointed out with judgment the proper mode of practice in this part of delivery. He has been ſucceeded by Mr. White, who, in his publication, has entered fully into this ſubject, and who, from a number of very juſt obſervations, the reſult of an extenſive practice, has at laſt fixt the conduct of practitioners in this part.

LXXXVII. It may be laid down then as a general rule in moſt natural caſes, when no particular urgent ſymptoms occur, that the management of the placenta ſhould be truſted to nature, by which is meant, that the accoucheur, waiting a certain time, till the patient complains of ſlight uneaſineſs in the uterine region, and previouſly aſcertaining by the external feel of the abdomen the ſtate of contraction, ſhould gently aſſiſt the uterine efforts by twining the cord round the fingers of one hand, while the other is applied to it higher up, within the vagina,—giving the proper direction for the exit of the placenta, by pulling the cord in a line with the centre of the pelvis, or as much as poſſible towards the ſacrum. If the uterine efforts are exerted, the cord will be felt to

lengthen at each pain; if the complete ſeparation has taken place, one pain will be ſufficient; if not, let an intermiſſion take place, waiting the repetition of more, which will ſoon occur; and in this way the extraction will ſoon be completed.

LXXXVIII. Before making any attempts at the extraction of the placenta, as deſcribed (LXXXVII.), a ſpace of at leaſt fifteen or twenty minutes after the delivery of the child ſhould intervene, or in proportion to the duration of the former labour and apparent irritability of the uterus, the expulſion of the placenta being moſt ſpeedy where the former parturition is tedious; and in this interval nothing ſhould be done, except applying a warm cloth to the pudendum, and occaſionally feeling the ſtate of contraction in the uterus.

LXXXIX. From the ſtate of the uterus, the repetition of pains is ſometimes marked by ſo little uneaſineſs, that the patient, from their compariſon with the former, has no idea of their being really ſo. If, however, the patient, in the ſpecified time, complains of an increaſed flow of blood as denoting the ſeparation of the placenta, aſſiſtance is then to be given in the manner directed.

XC. This is the common management we would recommend; and, in ninety caſes out of one hundred, it will be found ſufficient for the delivery of the placenta. But particular ſituations occur, in which this method may prove ineffectual, from urgent ſymptoms ariſing, which demand at once a ſpeedy extraction.

XCI. Theſe circumſtances are,

1. Violent hæmorrhage affecting the pulſe.

2. Faintings, the conſequence of the former; and, in this laſt caſe, the hæmorrhage is ſometimes concealed; or the placenta, filling up the orifice, confines the diſcharge.

XCII. The cauſes of theſe ſymptoms, though ultimately depending on the retention, may be referred either to the placenta itſelf or the uterus.

Where depending on the former, they conſiſt in morbid adheſion or rupture of the cord; where on the latter, in ſpaſm or irregular contraction of the organ.

XCIII. Morbid adheſion is the moſt dangerous cauſe of retention, and that in proportion to the ſpace of ſurface over which the adheſion extends. It may be either general or partial. The former is very rare, though ſome uncommon inſtances have occurred where the placenta poſſeſſed a general ſchirrous hardneſs; and being thus incapable of ſeparation, was retained for years.

XCIV. Partial adheſion is more frequent, and the point or lobule in this caſe is often retained, being ſeparated from the reſt of the placentary maſs by the operation. It is known when, after waiting the uſual time, the placenta does not ſeparate on any efforts we employ to aſſiſt, but the cord being extended, returns back with an elaſticity; and, on applying the other hand to the region of the uterus externally during theſe efforts of extending the cord, we find the uterus drawn forward, and again, on ſlackening the cord, recoil back to its former ſituation.

XCV. In this caſe ſeveral different modes of treatment have been recommended, in addition to pulling by the cord, in order to increaſe the contraction of the uterus, and effect a ſeparation. Theſe are ſneezing, coughing, friction of the abdomen, ſtrong preſſure downwards, &c. But when the adheſion is ſo ſtrong as to reſiſt pulling by the cord, theſe expedients will be ineffectual, and even tend to increaſe the hæmorrhage, already profuſe. Nay, the rapidity of the latter, and its powerful effects on the patient in a few minutes, will ſeldom admit the delay of ſuch modes of practice.

XCVI. The introduction of the hand, therefore, into the uterus is preferable, and the method of doing it is this.

Let the hand, in the form of a cone, be quickly paſſed through the vagina, for in paſſing here it chiefly gives pain, into the uterus, which will readily admit its entrance, and carry it as high as poſſible towards the ſituation of the placenta, to which you will be directed by the cord. Let the fingers then be ſpread out on the body of the placenta, ſo as to take a large hold of it; and drawing them in towards you, let the body of the placenta be graſpt, when the adhering portion will ſeparate from the ſurface of the uterus, or peel off; then turning the palm of the hand towards the abdomen, let it be gradually brought out with the placenta.

XCVII. Partial adheſion of the placenta is moſt liable to occur from previous diſeaſes of the uterus, eſpecially inflammation. It is always ready to occur in a ſubſequent delivery, where any force has been neceſſary to

effect the ſeparation in a former; and, more eſpecially, if the placenta occupy the ſame ſituation as it did then. In many women the uterus ſeems naturally to form too firm a connexion with the ſubſtance of the placenta, and its extraction is neceſſary in every labour. The preſſure of ſome member of the fœtus in a particular manner during pregnancy, againſt part of it, may occaſion alſo ſuch adheſion; and the more its ſituation recedes from the fundus, it is alleged by ſome authors, there is danger of partial adheſion, as the contraction towards the neck is not ſufficiently powerful to admit its complete ſeparation.

XCVIII. In every caſe where, on the introduction of the hand, as recommended (XCV.), the adhering portion cannot be eaſily ſeparated, rather than uſe violence to the ſurface of the uterus itſelf, it may be allowed to remain by detaching the reſt of the placenta from it; for it will be very rarely ſo conſiderable as to produce any very troubleſome effects.

XCIX. Rupture of the umbilical cord is the next cauſe of retention enumerated. It depends much on the operator; and we can only aſcertain by practice what degree of force the cord can bear. Its rupture, however, may ariſe from either of four circumſtances.

1. The application of too much force, even where it poſſeſſes a proper degree of ſtrength.

2. Its improper attachment weakening the degree of its adheſion.

3. Its thickneſs, the interpoſed gelatinous matter occaſioning its veſſels to be too much extended; or,

4. An incipient putreſcency of the placenta itſelf.

C. With reſpect to the firſt of theſe circumſtances, it has been known to occur at times in the hands of the beſt operator. It is always unpleaſant, as the appearance of the placenta after extraction without the cord gives an idea to the attendants of the operation being incomplete. It is by no means a dangerous circumſtance of itſelf, as the hand, though wanting the direction of the cord, can eaſily diſtinguiſh it from the ſurface of the uterus by the irregular vaſcular feel which the termination of the umbilical veſſels on its ſurface occaſions, by the abſence of pain, as the patient does not feel any great uneaſineſs when touched by the hand; and, laſtly, by its ſoft ſpungy texture, compared with that of the adjacent uterus.

CI. This accident of the rupture of the cord is very liable to happen to a young practitioner, who truſts rather too implicity in the powers of nature; for an averſion to the introduction of the hand will lead him, with a view to overcome the difficulty, to exert more force than the parts can bear, and he is then obliged to have recourſe to the ſame means, which, employed earlier, would have been attended with fewer obſtacles. On this account, perhaps, a young practitioner ſhould be adviſed, where any appearance of difficulty occurs, to introduce his hand oftener, for its extraction then may be ſtrictly neceſſary, as he has not then aſcertained by his own experience the proper time of waiting, nor yet the degree of force which the cord can commonly bear, while, if it is done cautiouſly, the patient will receive little or no diſadvantage, and, at the ſame time, the accoucheur will acquire a facility of introducing his hand into the uterus in ſuch ſituations,

which will render him no way intimidated to undertake it when ſtrictly unavoidable.

CII. The ſecond circumſtance mentioned as occaſioning rupture of the cord was its improper attachment; for in proportion as it is ſituated too near the edge of the placenta, its adheſion muſt naturally be weakened, from the ſmaller number of branches, or points of connexion. The ſame degree of force which can be ſafely applied while its inſertion is more towards the centre of the cake will be ſufficient to occaſion its rupture here.

CIII. The third circumſtance affecting the ſtrength of the cord is its thickneſs. This circumſtance has been particularly remarked by Mr. Puzos; for as it proceeds from a quantity of coagulable lymph, by which the coats of the umbilical veſſels will be more extended, in proportion to this extenſion they muſt loſe of their ſtrength; and hence all practical accoucheurs have remarked, that it is not from the apparent ſize of the cord we are to judge of the degree of ſtrength it poſſeſſes.

CIV. The laſt circumſtance producing a ſeparation of the cord from the placenta is an incipient putreſcency of the latter. This more eſpecially occurs in premature labours, particularly where any cauſe exiſting in the habit of the mother tends to weaken the attachment between her and the child. And it is a ſingular fact, that the placenta will be delivered at times in a ſemi-putrid ſtate, and yet the child appear at birth equally vigorous and healthy with any others as where the placenta retains its uſual health. This, however, is not to be conſidered as always the caſe.

CV. Theſe are the ſeveral cauſes which depend on the placenta itſelf; thoſe again, which may be referred to the ſtate of the organ, are even more frequent in their occurrence, and demand equal attention. The firſt enumerated was its irregular contraction.

CVI. By this, part of the membranes comes to be incloſed by the fundus, and proves a cauſe of the retention of the placenta, though it is otherwiſe completely ſeparated; and in this caſe the introduction of the hand to the fundus uteri will be equally neceſſary, as where the adheſion is much ſtronger.

CVII. The ſecond cauſe again, or ſpaſm, is equally frequent, and eſpecially after a firſt labour, where the habit of the patient is naturally irritable; and by it its cavity is either contracted in the middle, in the form of an hour glaſs, or its orifice is ſhut up, retaining the placenta from being expelled. In the firſt caſe the ſpaſm is very difficult to overcome; and, if time admit, a large opiate ſhould be adminiſtered (a practice firſt inculcated by the late Dr. HUNTER), and the hand retained in the uterus, endeavouring to overcome its contraction till the ſpaſm is relaxed. When once this takes place there will be little difficulty in effecting the extraction.

CVIII. This ſpecies of retention the French have properly termed the Encyſted Placenta. It was firſt remarked by Mr. PEU, who gives ſeveral inſtances of it in his treatiſe, though it has been erroneouſly ſuppoſed to depend on the ſituation of the placenta; and that the more directly it was placed at the fundus, the more liable was the ſpaſm to occur. The placenta, however, we

find generally ſituated at the fundus; yet this ſpaſm of the uterus does not occur once in a hundred times; and therefore it muſt ariſe entirely from the ſtate of the organ, independent of any ſituation of the placenta.

CIX. Spaſm of the orifice we find moſt frequently occur in the hands of females, who do not attend to the axis of the pelvis in extracting it. The os uteri of all parts of the organ is moſt acutely ſenſible; and, after the expulſion of the child, by its ſudden return to its natural ſtate, where the fibres poſſeſs much remaining laſticity, a degree of ſpaſm of it is induced. This, however, is generally overcome by the action of the fundus in expelling the placenta, where attention is paid to carry it directly through the centre of the orifice; but where this is not obſerved, and the operator attends only to the centre of the vagina, it is pulled againſt the orifice in an unfavourable manner, and the ſpaſm, inſtead of being overcome, is more rigidly formed. In this caſe a finger or two muſt be introduced into the os uteri, to catch hold of the edge of the cake, which, being brought without the orifice, the bulk of the placenta will naturally follow.

CX. Another cauſe of the retention of the placenta mentioned by authors is the inertneſs of the uterus. This more readily happens in caſes of over-diſtenſion of the organ, where more than one child has been contained in it. The great matter here is to give time; and, by friction of the abdomen, and even irritation of the os tincæ, to excite contraction.

CXI. This ſubject of the management of the placenta has been detailed with too much minuteneſs by

Baudeloque, the beſt author on midwifery, who has given particular directions for its treatment, according to the different ſituations of the uterus it may occupy. This, however, is not neceſſary. The general rule is, wherever ſymptoms requiring its extraction occur, let the hand be introduced, when the cauſe of retention will be aſcertained, and for the moſt part eaſily obviated; after which there is no difficulty in the extraction.

CXII. Having thus detailed the different methods of managing the placenta, whatever treatment we adopt the following maxims may be laid down:

1. That, even though no urgent ſymptoms occur to determine its extraction, yet the patient ſhould never be left by the accoucheur while it is undelivered, as, a partial ſeparation taking place in his abſence, fatal hæmorrhage before its expulſion may enſue.

2. The retention of the placenta ſhould in no circumſtances whatever exceed 48 hours, as ſymptoms of putrefaction then ſupervene, which endanger the conſequences of abſorption into the ſyſtem, as well as its action againſt the organ itſelf *. This is ſufficiently confirmed by the caſes of Mr. White, where too long retention of the placenta appears to have produced the moſt fatal effects; and even where at laſt excluded, after a continuance of ſome days, fever generally ſupervened, and from the weakened ſtate of the uterus, not able to reſiſt the increaſed circulation hereby induced, a pro-

* The author had lately an opportunity of ſeeing, along with Dr. Gartshore, a very ſingular caſe, where the placenta after delivery was never expelled, and where no dangerous ſymptoms followed. It was at the diſtance of five weeks from delivery that the author ſaw the patient; and he has ſince learnt that ſhe is perfectly well, without its ever coming away, or there being any appearance of diſcharge.

fuſe flooding generally ſucceeded the excluſion, and proved fatal to the patient.

CXIII. The delivery of the placenta ſhould in no caſe, even where attached, as ſometimes happens over the os tincæ, precede the birth of the child; for by its removal the uterine circulation is always expoſed; and without the organ poſſeſs an immediate contraction, a fatal hæmorrhage muſt enſue. Hence, in theſe caſes of flooding, where the placenta preſents at the orifice of the uterus, on the introduction of the hand for the purpoſe of delivery, it is to be cautiouſly avoided, and an entrance procured into the uterine cavity in another direction, ſo as to prevent, as much as poſſible, any ſeparation of it; nay, if completely occupying the os tincæ, a paſſage is to be made through its ſubſtance, rather than ſeparate any of the points by which it adheres; and this is a ſituation of it at times met with.

CXIV. In abortion the management of the placenta was formerly detailed; but the ſame danger from its retention does not take place to that degree as ſucceeds the delivery of the mature fœtus, and it is often, therefore, unavoidably retained.

CLASS II. *Of protracted Labours.*

CXV. This claſs we define,—labours beginning as natural, but where the pains do not recur in their progreſs with the ſame force and regularity as in the former, or, from the different ſtate of the containing parts, forming

a morbid reſiſtance to their efforts, where, even though powerful, they are attended with ſmall effect, being marked in their courſe by conſiderable intermiſſions of uncertain duration, and the pulſe, in the intervals of pain, retaining for the moſt part a quickened febrile ſtate.

CXVI. Under this claſs we mean to comprehend thoſe laborious caſes where nature, with time, of herſelf effects the delivery. And authors under this diviſion have included every labour whoſe duration exceeds twelve or eighteen hours. Yet other circumſtances may be introduced to diſtinguiſh them, as well as the ſimple period of duration.

CXVII. From the definition offered (CXV.) four leading circumſtances are noticed as characteriſing them; and theſe are,

1. Irregularity in the progreſs of pain.
2. Want of effect.
3. Intermiſſion; and,
4. General fever.

CXVIII. In natural labour the pains, it was remarked, obſerve a regular progreſſion, according to its duration, and on which we can depend. They are at firſt ſlight, and diſtant in their period of attack. Their occurrence becomes gradually more frequent, while they acquire at the ſame time an increaſed power, and their force becomes ſo violent in their laſt exertions as to require the aſſiſtant efforts, on the part of the patient, to be ſomewhat repreſt, from the danger of rupturing the external parts, an accident that frequently takes place where they are quick.

In the preſent claſs again, this progreſſion of pain does not proceed with regularity; and hence we can form from it no prognoſis, or determine the period of continuance.

CXIX. Every pain alſo in natural labour poſſeſſes a ſenſible power on the uterine orifice. In the protracted each ſingle pain has comparatively little or none; and, where even it has, the effect gained is frequently loſt by the orifice again contracting on its departure, from the different ſtate of the parts, and the efforts of ſeveral pains therefore, with the greateſt voluntary exertions the patient can employ, have generally leſs influence than one pain in natural labour.

CXX. No intermiſſions properly prevail in natural labour, except on the rupture of the membranes. When the uterus poſſeſſes much elaſticity, this is even very trifling, and one continued pain often takes place till the head is expelled. Hence one of the diſtinguiſhing marks of labours of this claſs is their intermiſſion; for the uterus, finding itſelf incapable of overcoming the reſiſtance, has its action for a time ſuſpended, ſimilar to what occurs in the bladder of urine in caſes of ſuppreſſion, or in the ſtomach when worn out with the repeated efforts of vomiting: and this ſuſpenſion is attended with a ſtate of feeling in the uterine fibre, which, not riſing to the height of pain, communicates however to the ſyſtem a degree of irritation, occaſioning fretfulneſs, and reſtleſſneſs in the patient, which it is often difficult to overcome. In this ſuſpenſion of uterine pain a great regularity is obſervable; and where the labour is protracted for ſeveral days we may generally expect an intermiſſion every twelve hours. This is even remarked by the women themſelves; and generally taken notice of by them to the practitioner.

CXXI. The laſt circumſtance enumerated, as diſcriminating protracted labour, is the occurrence of actual fever, or rather continued pyrexia. This does not properly occur in natural labour. The increaſed action in it is merely temporary, and attends only the preſſure of pain; and, if continued, it is confined generally to the ſtage of expulſion. Beſides, in ſuch caſes, the pulſe is full and ſtrong; but, in the protracted labour, particularly in its advanced ſtage, it becomes always conſiderably quickened, and for the moſt part weak.

CXXII. The cauſes of protracted labours have been detailed at very great length by authors, and they have even extended them to a number almoſt infinite, ſo that no practitioner in his attendance can recollect the one half of them. Before entering upon the enumeration of them, it may be aſked ſuch authors what is their intention in remarking theſe difficulties,—certainly in order to detect and relieve them. If theſe difficulties, then, are not apparent in the progreſs of labour, their knowledge is of no conſequence; and it is only thoſe that are apparent, and which we can remedy, that deſerve our attention.

CXXIII. Theſe ſeveral cauſes may, from their mode of action, be reduced to two general heads; either,

1. Want of power, or impaired uterine action; or,
2. Real reſiſtance, impeding the effect of the action.

CXXIV. Under the firſt we comprehend weakneſs—early rupture of the membranes—over diſtenſion—or fixed irritation of ſome neighbouring part.

Under the ſecond, rigidity of the os tincæ—contrac-

tion of the parts—narrowneſs of the pelvis, without any real diſtenſion, &c.

CXXV. Weakneſs from relaxed habit cannot prove a cauſe of difficult labour; for the ſame relaxation that prevails in the uterus will prevail in the external parts, and hence the labour cannot be retarded on this account. In proof of it, we find that women of a fair complexion and fair hair, in whom ſuch a ſtate of ſolid generally prevails, ſuffer proportionally leſs than thoſe of an oppoſite temperament; women alſo, even though weakened by diſeaſe, as in the laſt ſtage of phthiſis, have eaſy deliveries. It is only in caſes of little women ſuch a cauſe can have effect, where, from the diminiſhed capacity of the thorax, the aſſiſtant efforts are not ſufficient to aid thoſe of the uterus, and in this way deformed women, even where the pelvis is well ſhaped, have often protracted labours.

CXXVI. An early rupture of the membranes and premature excluſion of their contents is alſo a frequent cauſe of difficult labour, and the manner in which it acts it is proper to explain.

The dilatation of the uterine orifice depends for its quickneſs on the diſtending body being engaged in it. Where the waters are kept entire, they accommodate themſelves to the degree of dilatation; but the head cannot; and therefore till the os tincæ is dilated ſo far as to receive the head the dilatation muſt be very ſlow, and depend on general preſſure, while part of the fluid retained by the head filling the paſſage will at the ſame time prevent the uterus from receiving that increaſed ſtimulus from the reſiſtance of the child which is neceſſary to render the pains here ſtrong and forcing.

CXXVII. A third cauſe of ſlow labour, by impeding the uterine action, we mentioned to be over diſtenſion.

In caſe of twins, the contractions of the uterus we find ſlow and triffling; and till the waters are expelled, the pains ſeldom poſſeſs any force or preſſure ſufficient to effect delivery. The ſigns of twins, however, previous to the birth of the firſt, are all fallacious; and therefore the rupture of the membranes, as ſuppoſing the protraction from this cauſe, may be attended with bad conſequences, if not really ſo, and even increaſe that very ſtate of contraction we wiſh to remove.

CXXVIII. A fourth cauſe enumerated under this firſt diviſion was fixed irritation of a neighbouring part. This is well exemplified in caſes of ſuppreſſion of urine, labour being evidently detained by this cauſe. Coſtiveneſs has been alſo mentioned; but the rectum is a more paſſive organ, than the bladder, and is accuſtomed to bear ſuch irritation. If alſo impeding labour, this can only happen in the third ſtage, and while the preſenting part is paſſing through the ſpace of the pelvis. The effects, however, of ſuppreſſion of urine are always conſiderable; and convulſions in labour are known frequently to ariſe from this cauſe.

CXXIX. Theſe, then, are the ſeveral cauſes which act merely by weakening the uterine efforts, and form the firſt diviſion on which the protraction of labour depends; the ſecond, or thoſe which form a real reſiſtance to the efforts, however powerful, are more numerous and more difficult to obviate.

CXXX. The firſt commonly remarked is rigidity

of the os tincæ,—the orifice, from the commencement of labour, feeling firm and elaſtic, and in the progreſs of the ſecond ſtage acquiring an increaſed thickneſs, or appearing in the form of a tumid ring round the preſenting part. Sometimes in women who have had children it divides into two flaps, placed towards the pubes and ſacrum,—the former retaining an unuſual thickneſs, which is increaſed by its preſſure in the time of pain againſt the bone, and which retards the dilatation of the orifice.

CXXXI. A cauſe of difficult labour may be here mentioned, which, though connected with this article of rigidity, can hardly receive this title. It occurs in a firſt labour, particularly where the female is of a ſanguine temperament, and where the os uteri poſſeſſes a very elaſtic irritable ſtate; for by the action of the fundus it is frequently thrown into ſpaſm, and before this can be overcome the patient will often be ſeveral days in labour: nay, in the courſe of labour, the orifice will at times dilate to a certain extent; and on examination ſome time afterwards, be again ſomewhat contracted. In theſe caſes a practitioner, in forming a prognoſis, may be very much miſtaken; and as the os uteri is always here very low, and its ſides even uncommonly thin, he may be the more deceived in forming an opinion.

CXXXII. The real rigidity is the effect of either age or diſeaſe. We find it therefore generally occur in a firſt labour, where the woman is advanced in life, and where of courſe labour commences before the neck and os tincæ are extended to the ſame degree as in other caſes; the general rigidity of the uterus hindering the fundus from yielding to its contents to the ſame degree of extent as where its fibres are more ſoft and yielding.

Where it takes place in ſubſequent labours, it is generally the effect of long preſſure of the preſenting part, and of the violence neceſſary in inſtrumental delivery.

CXXXIII. The ſecond cauſe enumerated under this head is contraction of the parts; and hence, in general, every firſt labour is more tedious than the ſubſequent. This contraction is connected with two circumſtances which point out its nature, either a diminiſhed excretion of mucus in the vagina, or a ſpaſmodic ſtate of its ſphincter. That the excretion of the vagina is uſeful in delivery, there can be no doubt, as we find that wherever irritation is applied, it is the means employed by nature of preventing or obviating inflammation. Hence, wherever it is deficient in a firſt labour, we find generally a tendency to inflammation; that is, a burning heat within the vagina, and a painful ſtate, ſo that it gives uneaſineſs on the ſlighteſt examination. The ſpaſmodic ſtate of the ſphincter we can only know in the laſt ſtage of labour; and in theſe caſes the head will often continue for hours at the os externum, threatening to be expelled every pain, and occaſioning the moſt uneaſy ſtate to the patient, from the long ſtretching of the perinæum and external parts.

CXXXIV. A cauſe of protracted labour in a firſt caſe is alſo at times a counter-exertion on the part of the patient. It generally only affects the firſt ſtage of labour, before the os uteri is fully dilated. The patient, as ſoon as ſhe feels pain, ſtrives as much as poſſible againſt the action of the uterus; and in this way, by want of the aſſiſtant efforts, the pains continue to have little effect, till the dilatation of the os tincæ being com-

pleted, the assistant parts are brought so powerfully into consent, that any voluntary opposition on her part has no farther influence.

CXXXV. The third cause, forming resistance to the action of the uterus, is narrowness of the pelvis, without any real distension. This often occurs in women who are early married, and have children before their twentieth year. It is generally known by examination, and the subsequent labours of such women are commonly easy. It is of great consequence in these cases to retard as much as possible the action of the uterus, and to allow a long retention of the head in the passage. Protracted labour from this cause more frequently takes place where the child happens to be a male; and in these cases we may pronounce on the sex *à priori*, and we shall very seldom be deceived.

CXXXVI. These are the several causes (from CXXIII. to CXXXV.) commonly met with, that occasion protracted or merely lingering labours, which are completed, as well as the former class, by the efforts of nature alone. Many others have been enumerated; but they either very rarely occur, are merely imaginary, or may be explained in a different way. We shall enumerate, however, the principal of them.

CXXXVII. One commonly mentioned has been polypous tumours of the uterus or vagina. That these may happen we do not deny; but they are so very rare, that they should not be introduced on all occasions among the causes of protracted labour, as such variety will only perplex the student; and none should be intro-

duced but what frequently occur, and are neceſſary to be known in practice.

CXXXVIII. In the ſame manner, we find calculus of the bladder mentioned as having a ſimilar effect. That ſuch has been the caſe there is no doubt; but that ſuch never occurred to four-fifths of the moſt eminent practitioners is equally true, which ſhould determine our concluſion.

CXXXIX. Paſſions of mind have been enumerated too under this head. They form, however, a very accidental cauſe, and therefore may be properly omitted, where we conſider thoſe only that more conſtantly and unavoidably take place.

CXL. Another ſtrongly inſiſted on by many authors, is obliquity of the uterus,—a piece of theory which has been unluckily aſſumed, as is often the caſe, for a fact. It was to ſupport this ſuppoſed diſcovery DAVENTER's publication was written. That the uterus inclines naturally in the gravid ſtate a little to one ſide every accoucheur knows; but that the neck and os tincæ are connected ſo to the vagina, as not to be affected by this inclination, is alſo true; while the neck, being a fixt point, to which the contraction of the fundus tends, the body contained, independent of the ſituation of the fundus, muſt be naturally determined by its action this way. Hence we find no ſituation of labour occur, but what the os uteri, a proof of its fixt ſituation, can generally be felt. Beſides, as in every caſe the uterus inclines a little to one ſide, or forms an obliquity, every labour, on this principle, ſhould be difficult and protracted.

CXLI. Another cauſe has been circumvolutions of the umbilical cord round the child's neck; but it is to be doubted much in theſe caſes, if the difficulty proceeds from this cauſe; for the head is naturally ſo rivetted in the pelvis in every caſe of labour, that, even ſuppoſing it to take place, the fundus uteri would rather be prevented from retracting on the ceſſation of pain, as being more pliable, or elſe flooding would enſue, which I have never in theſe caſes perceived; and the child, when born at laſt, poſſeſſes generally a ſufficient length of cord to allow its being laid by the ſide of the mother, which could not happen were the length to affect the delivery. The leading ſymptom in this caſe is, the reſilition of the head on the departure of pain; but this may depend on the ſimple elaſticity of the vagina itſelf, which frequently, on the introduction of inſtruments, throws them, by its contraction, from their place, after being applied; and this is the more confirmed, as ſuch ſuppoſed caſes of circumvolution I have generally found in a firſt labour.

CXLII. In many authors there is found alſo an improper poſition of the ſhoulders, placed towards the ſacrum and pubes, mentioned as a cauſe of protracted labour. Such a caſe I never met with; and it is now well aſcertained that the ſhoulders, when they enter the pelvis in the ſame manner with the head, accommodate themſelves to its dimenſions; and before they enter the pelvis, there is always ſufficient room for their paſſage, either in one direction or another, the ſpace formed by the expanſion of the ilia being ſufficiently large; ſo that from this view it can only happen when the head is expelled, and then delivery is always in our power.

CXLIII. Rigidity of the very membranes has alſo not been omitted among the cauſes of protracted parturition; but it may be here more properly explained in a different way. It is mentioned by authors as taking place only after the os tincæ is fully dilated, when the membranes remain entire; and, from obſervation, it ſtands thus. It occurs in torpid habits, where the uterine fibres poſſeſs little elaſticity. On the full dilatation therefore of the os tincæ, the reſiſtance from diſtenſion being in ſome degree taken off, or an acquired ſpace gained, the pains become, from the ſmall tendency in the uterus to contract for ſome time, ſuſpended, or ſo ſlight, as to have no effect even on the membranes. On rupturing then the membranes, the fibres being brought into action, or acquiring a degree of elaſticity, and receiving at the ſame time an increaſed ſtimulus from the body of the child, labour is ſoon completed; but the membranes, on their rupture, diſcover no particular morbid rigidity.

CXLIV. From the cauſes, we proceed to examine the management of this claſs of labours, according to the nature of theſe cauſes deſcribed: this we do by obſerving, that in their treatment a good deal of art is required; and as the chief object is the gaining time, ſome addreſs is neceſſary to enſure the patient of the ſafety of her ſituation, and of that perſeverance in her efforts which is neceſſary for its accompliſhment. To gain the firſt, where early called, do not give into her belief for ſome time that ſhe is in labour; and even when you are at laſt under the neceſſity of admitting it, endeavour to perſuade her to uſe no aſſiſtant exertions to co-operate with the pains, but let her ſtrength be reſerved till the difficulty is in part overcome, when they

will be attended with more effect to expedite the delivery, especially where the cause depends on rigidity of the os tincæ.

CXLV. With respect to the first (CXXV.) if real weakness is ever a cause of protraction, cordials are indicated for its removal; but even in patients under disease, there is always observed sufficient strength, if there is no other impediment, to effect delivery.

CXLVI. In the case of early rupture of the membranes (CXXVI.) the waters must be fully evacuated, before the pains possess any sensible effect; and the treatment consists, previous to this, in either letting off what remains, by introducing a finger in the time of pain, and raising the head, which, on two or three times repetition, or in the space of half an hour, will prove effectual; or, instead of this, opiates may be employed to prevent uneasiness, till the waters are evacuated naturally.

CXLVII. In over-distension (CXXVII.) as in twins, the rupture of the membranes will bring the uterus into strong action; but much judgment is necessary, as was observed, to discern that this is the cause of protraction, before attempting it.

CXLVIII. In the case of fixt irritation of some neighbouring part, the ascertaining the latter will determine the particular treatment (CXXVIII).

1. The most frequent irritation is from suppression of urine. This is a circumstance should be always enquired into; for if the head is any way advanced, it becomes difficult to employ the catheter; often impracticable;

and, morbid ſymptoms ariſing from this ſource, it becomes, at times, neceſſary to expedite delivery by mechanical means, to relieve this affection. If the head is little advanced, an attempt may be made to introduce the catheter, by paſſing a finger between the head and os pubis, to give ſpace for allowing it to proceed. If again farther advanced, the head is to be puſhed into the hollow of the ſacrum; and the preſſure of the urethra being removed by the natural efforts of the woman, an evacuation may, perhaps, take place; yet, if unſucceſsful, the head is ſtill to be puſhed back before the application of the catheter; or if too firmly wedged to admit this, a trial is next to be made with a male catheter, to get beyond the cauſe of obſtruction.

2. Another affection, that at times occurs in irritable habits, is ſpaſm of the abdomen, and that to a moſt violent degree. Its relief is only to be obtained by a liberal uſe of opium in glyſter.

3. Coſtiveneſs is generally reckoned by the women a cauſe of difficult labour, and hence they have always recourſe to injections of a laxative kind. It has the good effect to render the uſe of laxatives leſs neceſſary after delivery.

CXLIX. In this manner we attempt to relieve the firſt ſet of cauſes, or thoſe which produce an impeded action of the uterus itſelf. The ſecond, or thoſe which form a reſiſtance to its efforts, are leſs in our power.

CL. In rigidity of the os tincæ the treatment conſiſts in the introduction of a finger into the orifice before each pain, and rolling it round, in the time of it, ſo as to aſſiſt the dilatation. Some authors, inſtead of

the finger, have recommended the blunt hook; and, where a real callous rigid ſtate prevails, ſuch expedients may be employed with ſome advantage, though the finger is always preferable to any thing elſe.

Where the rigidity is the effect of diſeaſe, and will not yield to the natural efforts, other means will ſtill be required; and we have, in the medical eſſays of Edinburgh, a very remarkable caſe of this kind, by the late Dr. SIMPSON, where the rigidity depending on a cicatrix, from former diſeaſe, an inciſion was found neceſſary to divide the os uteri, and thus the delivery came to be accompliſhed.

CLI. In the caſe of contraction of the parts little can be done. The uſe of oily injections, &c. have been recommended. In theſe caſes, however, where it is a firſt labour, a conſiderable fever, and a burning heat within the vagina, veneſection is then ſtrongly indicated. This remedy was formerly very indiſcriminately uſed, and in France it ſtill continues to be employed in ſituations of labour, where it muſt be detrimental. In this country it has never been a very popular remedy in labour, but it will be attended with the beſt effects in thoſe circumſtances we have pointed out. Many practitioners alſo have recommended it in real rigidity; but, as the latter is more a chronic ſtate, and a natural effect of age, it can have very little influence here; and, if carried far, there is hazard of its producing ſuch a debility, as, if not protracting the labour, at leaſt retarding the recovery.

CLII. In the laſt cauſe enumerated, or narrowneſs of the pelvis, where a diſproportion between the fœtal

head and the natural paſſage takes place, without any particular diſtortion, it is of great conſequence to ſuſpend, as much as poſſible, the action of the uterus, and to allow a long retention of the head in the paſſage. This may be done in two ways, either by preventing, as much as poſſible, the aſſiſtant efforts on the part of the patient, or allowing only the action of the uterus itſelf. And in this way the ſtrength of the patient will be reſerved. Or it may be done more powerfully by the aſſiſtance of opiates, with the ſame reſtriction on the occurrence of pain.

The head in theſe caſes, by ſimply lying in the paſſage, becomes gradually moulded to its cavity; while, on the contrary, if propelled with too much force into it, as it is not capable of overcoming the reſiſtance, the head becomes at once ſo rivetted on ſome of the projecting points, without any tendency to elongation, that it remains fixt, unleſs the ſtrength of the patient be very conſiderable; and as, on the contrary, it is generally exhauſted, an entire ſuſpenſion of pains takes place, or the ſtate of the patient, from being worn out, requires immediate delivery by the aſſiſtance of art. On this account it is of great conſequence to reſerve the ſtrength of the patient, and, by a gradual exertion of the powers of nature, to effect delivery.

CLIII. In this manner would we recommend protracted labours to be conducted, according to the ſeveral cauſes from which they ariſe.

In the caſe of circumvolutions of the cord, enumerated as a cauſe of protraction by authors, (CXLI.), it has been propoſed to introduce a finger laterally, to-

wards the neck of the child, and on it a pair of ſciſſars, ſo as to divide the cord. The objections however to this practice are, that, independent of the difficulty of performing it, if the head is not expelled in a few pains after, the hæmorrhage from the divided extremity of the cord belonging to the child will prove fatal.

CLIV. A cauſe of protracted labour, hitherto omitted, as deſerving a ſeparate conſideration, is, an unfavourable preſentation of the head, including the variety of what have been termed face caſes.

For, though the vertex naturally preſents with the face turned to the hollow of the ſacrum; yet, in certain rare caſes, the face itſelf forms the preſenting part; which is commonly known from its irregular feel: and by the direction of the chin you get acquainted with the particular poſition of the face.

CLV. Face preſentations conſiſt of three varieties:

1. The chin to pubes.
2. To the iſchium; or,
3. To the ſacrum.

In all theſe caſes the labour, though ſlow, is generally accompliſhed by the natural efforts; for, if early called, you can change the direction of the head by puſhing up the chin, and then the preſentation is altered.

Where it proceeds in the original direction in which it preſents, the face of the child is commonly much diſfigured on delivery; but this goes off in a ſhort time; and, in all ſuch caſes, if the preſentation cannot be altered by puſhing up the chin, nothing further is to be attempted; for the old practice of puſhing back the

head, and attempting to deliver by the feet, is highly dangerous, and what no modern practitioner will ever think of. And, though the delivery is here somewhat slower than in the natural labour, yet, if the pelvis is well formed, it is generally accomplished at last without any particular assistance, the head with time moulding itself in the same manner as in the natural presentation. Such cases are very rare, and hardly ever met with above once or twice in a long course of practice.

CLASS III. *Of Instrumental Labours.*

CLVI. This class we define labours, that observe the same progress with the protracted; but where the morbid resistance is chiefly formed by the included bony space, which is ascertained in their progress, either by examination of the space itself, or the state of the fœtal head forced into it.

CLVII. By examination of the space the dimensions of the pelvis can be pretty certainly known. Thus, wherever the finger introduced within the vagina touches easily the sacrum or coccyx, the pelvis is confined in this direction. Wherever again two fingers are not admitted easily under the arch of the pubes a distortion of this part may be suspected. Where the hand introduced by the lateral part of the pelvis is crampt in its passage, the general space of the cavity is defective. Where the finger brought round the head, having already entered the pelvis, feels a considerable space on one side

more than another, a projection of the ſacrum takes place; and where the head, on the commencement of labour, is too eaſily felt, before entering the pelvis, a general ſhallowneſs of the capacity is more or leſs indicated.

CLVIII. By the ſtate of the fœtal head, alſo, a judgment may be readily formed. Thus, if it do not enter the pelvis readily after the commencement of labour, though aſſiſted by much preſſure of pain, if, after having entered, a tumour form on the preſenting part, and if the bones alſo ſeem to overlap, there can be no doubt that the ſpace is confined for its paſſage.

CLXIX. In theſe caſes the uterine action proving ineffectual, and the patient becoming exhauſted from its long continuance, while fever ſupervenes, the labour paſſes from the protracted to the preſent claſs, or requires the aſſiſtance of art to expedite delivery.

CLX. In the early practice of midwifery all protracted labours were referred to this claſs, or removed by the uſe of inſtruments. In this way their application was too general; but the progreſs of the ſcience has gradually leſſened their number, and of the remaining few even limited the uſe. It was from the injudicious application of inſtruments that many practitioners, to conciliate the public favour, have ſet out of late years with the ſpecious pretence of doing all by the hand alone. Every accoucheur, however, who has a knowledge of practice, will readily allow that they are frequently unavoidable, and that the only ſafety of the patient depends on their uſe.

CLXI. The reaſons urged againſt them have been the morbid conſequences attending their employment; but, in modern practice, we find that ſuch conſequences very rarely occur; and on this account we muſt conclude, that thoſe practitioners who oppoſe them, however reſpectable for their abilities, either uſe them improperly, or their conſtruction, as uſed by them, is unfit for the purpoſes intended. Hence their declamations are only proofs of their want of dexterity. At the ſame time it is proper that ſtrong cautions ſhould be given againſt their precipitate application, as it muſt be allowed that there is no practitioner who is dextrous in the uſe of them but muſt have often employed them without any real neceſſity; yet, if expert, little or no danger will ariſe from them, while the duration of labour may be thus conſiderably ſhortened, with advantage to the patient. Hence the rule of Dr. DENHAM, that every caſe in which they are required is to be conſidered as an exception to the eſtabliſhed practice of midwifery, is perhaps going too far, for we have inſtances of patients ſuffering from too long truſting to the efforts of nature, as well as from too early an interference of art.

CLXII. The intention of all inſtruments, then, is the extraction of the child; and the principles on which they perform this are either,—

1. By ſimple detruſion.
2. By compreſſion; or,
3. By actual diminution of the preſenting part.

CLXIII. The firſt of theſe is anſwered by the *vectis* or *lever*.

The ſecond by the uſe of the *forceps*; and,

The third by the *crotchet* and *long ſciſſars*.

CLXIV. In all the inſtrumental labours, before having recourſe to the means employed for delivery, certain preparatory ſteps are neceſſary to be attended to. Theſe conſiſt in producing,—

1. A due collapſe of the adjacent parts affected by delivery; and,

2. Directing the proper poſition of the patient.

CLXV. The firſt is effected by clearing the inteſtines, and by the uſe of the catheter, where any tendency to retention of urine has taken place during the progreſs of labour.

The poſition of the patient ſhould be always ſtudied, to be moſt convenient for the operator. The back is with this view preferable to any other, the breech being brought towards the edge of the bed, and each thigh held as under, by an aſſiſtant placed there for the purpoſe.

CLXVI. Having finiſhed theſe preparatory ſteps, the delivery is next to be attempted. In all labours of this claſs two ſtages may be marked out in their progreſs: the firſt is that of the application; the ſecond is that of the extraction.

CLXVII. The chief circumſtances to be attended to in the former, are—

1. The properly aſcertaining the poſition of the preſenting part.

2. Introducing the hand ſo far, as to be a ſufficient guide to the inſtrument in its application; and,

3. Securing it in ſuch a manner, that its removal may not take place on attempting the extraction.

CLXVIII. The circumſtances to be regarded in the latter, are—

1. That the extraction be gradually performed, reſembling as much as poſſible the efforts of nature; and the latter, if occurring, are to be taken advantage of in aſſiſting the extraction.

2. That the bulk of the preſenting part be carried by the operator, in its deſcent to delivery, as much as poſſible againſt thoſe parts capable of yielding to admit its paſſage; and thus obſerving the different axes of the pelvis and vagina.

CLXIX. With theſe preliminary obſervations on inſtrumental labours, we proceed to their firſt diviſion, or thoſe caſes in which the application of the *vectis*, or *lever*, has been recommended.

1. *Lever.*

CLXX. This is the firſt inſtrument we find invented for the preſervation of the child; all the more ancient being profeſſedly conſtructed with the intention of either tearing it to pieces, or being ſo fixt to the preſenting part, as at any rate to deſtroy its exiſtence. This inſtrument became particularly celebrated in Holland, under the name of the Roonhuyſian ſecret; and was reckoned ſo neceſſary to a ſucceſsful practice of midwifery, that no reputation could be gained by any one, as an accoucheur, without being in poſſeſſion of it. When publiſhed, it was found to be nothing more than the lever; the uſe of which, though proper at times, is ſtill very much limited.

CLXXI. The principle of its action consists in the detrusion of the presenting part from under the pubes into the hollow of the sacrum; by which the resistance of the bony space being taken off, and the head confined only by the dilatable soft parts, it comes soon on the occurrence of pains, which are excited by the irritation of the vectis continuing to be expelled. Thus it acts in two ways:

1. As altering the real position of the presenting part; and,

2. As a mechanical stimulus, producing an increased uterine action.

CLXXII. The method of using the lever is simply this. Let the hand be introduced as high as possible between the presenting part and the pubes; on it the point of the lever is to be directed, till it reaches so high, that the concavity of its blade is properly applied on the convexity of the occiput. The hand directing it is then to be withdrawn, and an attempt made, by moving the handle to bring down the presenting part; while the other hand, in order to assist it, is applied to draw forward that part of the head situated at the sacrum.

CLXXIII. On this instrument it may be remarked, that before its publication as the Roonhuysian secret, it possest a degree of credit equal to the greatest discoveries; but no sooner was it made known, than it lost greatly of that reputation it had formerly acquired. The simplicity indeed of the contrivance, and some inconveniences that appeared to attend its application, were the causes of this change; and the forceps seemed, therefore, an instrument more deserving attention, as well as more capable of improvement. Thus, from the

time the forceps came to be employed, moſt of the writers on midwifery have entered into a compariſon of the relative advantages attending the uſe of each.

CLXXIV. The objections urged againſt the lever are chiefly on account of its fulcrum, or reſt in action, being on the pubes; as its power, if ſufficiently ſtrong, muſt be proportionally exerted againſt the urethra, or bladder of urine. On this account, many accidents have been known to ſucceed its application; and ſeveral practitioners have directed its being introduced, on the contrary, from the ſide of the pelvis, or along the ſurface of one of the iſchia; but in this ſituation it cannot act with the ſame advantage, as the reſiſtance to the paſſage of the head is chiefly from the tranſverſe diameter of the pelvis.

CLXXV. The objections thus urged againſt the lever we contend have ariſen more from practitioners when employing it, not attending to particular circumſtances in its form, ſize, and application.

CLXXVI. With reſpect to its ſize, the original Roonhuyſian one was too ſmall, and on that account preſſed entirely on the ſituation of the urethra, not being ſufficiently expanded to reſt upon the more diſtant parts of the pubes. It was at the ſame time entirely ſolid, ſo that it could not avoid injuring the part on which it preſſed. We would, therefore, recommend that its breadth be pretty conſiderable, that its blade ſhould alſo be hollowed for the greater part, ſo that a ſufficient ſpace may be allowed for the ſafety of the urethra; which, if the practitioner is attentive in his application, will eſcape entirely being compreſt by the inſtrument.

CLXXVII. In regard to its form, its blade ſhould poſſeſs a greater curve than the forceps, ſo as to be applied accurately to the convexity of the occiput, that it may not ſlip after being applied; for it is generally more difficult to introduce it than the forceps, the ſpace being more confined, and this difficulty is even increaſed by its curved ſhape: for this reaſon the late Dr. AITKIN has conſtructed what he terms a living lever, which is introduced ſtraight, and, by turning a ſcrew, it then receives the proper curve, which adapts it to the preſenting part; but the fault of this inſtrument is, that what advantage it poſſeſſes over the other in facility of introduction is counterbalanced by its proportionate want of power; for where much force is required, it bends too readily, and thus eaſily loſes its hold, requiring a new introduction.

CLXXVIII. As the chief objection aroſe againſt the lever, from its reſt being on the pubes, modern practitioners have endeavoured, by means of a hole at this part, through which a piece of ſtring is faſtened, by pulling it down here with one hand, while the other is applied to the handle to leſſen its preſſure, and thus avoid the conſequences which its uſe, according to the former method, produced. It is with this improvement that it is, at preſent, much employed by the London practitioners.

The length of the lever is alſo a circumſtance, in order to its ſucceſsful application, requiring attention; for if too ſhort, its power is not ſufficient to bring down the head; and the longer, therefore, it is made, the more ſucceſsful will its application be found.

CLXXIX. For theſe reaſons, we conſider the lever as, in many caſes, a very uſeful inſtrument, and as by no means deſerving that indiſcriminate cenſure it has received from many authors. Its application would certainly be by no means proper in high caſes of diſtortion, neither will it ſucceed where the preſenting part is ſtill high, and not at leaſt an inch within the pubes; but in thoſe ſituations where the head has deſcended low, where the pelvis is well formed, and where the labour is protracted, chiefly by the abſence of pain from the exhauſted ſtate of the patient, and ſome rigidity of the ſoft parts, it is an inſtrument better calculated for delivery than the forceps, as it can be uſed even without the knowledge of the patient; and its action may be even increaſed by changing her poſture, or placing her on her knees, while her arms are extended round the waiſt of another perſon ſeated for this purpoſe.

2. *Forceps.*

CLXXX. From the lever, we come to conſider the ſecond inſtrument, the forceps, which has been more generally uſed.

The firſt idea of the forceps ſeems to have been nothing more than a double lever, or an additional blade to the former, if we may judge from the manner in which directions were given to introduce them,—which was, with one blade to the pubes, and the other to the ſacrum. The firſt who brought them into general uſe, if not their original inventor, was Dr. CHAMBERLAIN; but the particular caſes to which their application was

proper were not juſtly determined by him. On this account they were too indiſcriminately had recourſe to, wherever difficulties occurred. This we find confirmed, by the inſtance of their failure in the hands of CHAMBERLAIN himſelf, related by MAURICEAU; which led this author, who was entirely unacquainted with them, to reject them as a very uſeleſs invention. Dr. CHAPMAN was the firſt who gave a plate of the inſtrument; and, by this means, ſubmitted to the deciſion of the public what had hitherto been concealed in particular hands as a ſecret.

CLXXXI. Before the invention of the forceps, the applications had recourſe to, on the ſame principle, were different kinds of fillets; but theſe were ſo difficult in their application, that only a few practitioners, their inventors, could make uſe of them. Afterwards, when the forceps began to be firſt known, but when practitioners did not excel ſo much in their uſe as they have done ſince, and of courſe bad conſequences attended their application, many endeavoured to ſuperſede the neceſſity for them, by different methods of manual aſſiſtance; particularly Dr. DAVENTER and Sir FIELDING OULD.

CLXXXII. Dr. DAVENTER's method conſiſted, on the head's deſcending very low, in the introduction of the left hand into the vagina, towards the coccyx; the woman being previouſly laid on her left ſide, ſo that no preſſure againſt theſe bones might take place; and in the time of pain in thruſting back that bone, to admit of the enlargement of the paſſage, which was to be continued till the head advanced ſo far, that the other hand could be applied to the pubes, to aſſiſt in its extraction.

CLXXXIII. OULD's method differed but little from this of DAVENTER. Inſtead of introducing the hand into the vagina, to force back the coccyx, which both theſe authors ſeem to have conſidered as the chief cauſe of protraction in ſuch labours, OULD recommended the introduction of the thumb into the anus, and fixing it on the point of the coccyx, while the fingers of the ſame hand are applied to the lower part of the ſacrum, and thus a counter-preſſure to the thumb is formed, and the coccyx pulled out as far as neceſſary. When the head is ſtill farther advanced, the fore finger is to be introduced in the ſame way with the back of the hand, towards the ſacrum; and being thruſt in as far as poſſible, on bending it, it may be fixt under the child's jaw bone, near its articulation with the cranium, and thus, along with the mother's efforts, ſome aſſiſtance may be given to forward the delivery.

CLXXXIV. But all theſe expedients will appear to every one converſant in practice inadequate for the purpoſe intended; while, if the exertions made on theſe parts are ſufficient to have any effect, they muſt do miſchief. On this account they are now entirely laid aſide, and can no way ſuperſede the uſe of the forceps.

CLXXXV. As the utility of the forceps came to be eſtabliſhed, practitioners ſoon attempted to render them more complete, and this they did in three ways:

1. By leſſening their original ſize.

2. By rendering the junction of their blades more eaſy when applied; and,

3. By giving them a particular curved form. And in this way a variety of kinds have been invented, in

which more ingenuity has been often displayed by the inventors in their construction than real practical knowledge.

For different figures of them the works of the several authors may be inspected from the time of Dr. CHAPMAN, who gave the first plate of them to the present period, when the rage for alteration in this way seems to have abated; and the only ones necessary in modern practice are the improved ones of Dr. ORMS, and the long ones of Mr. PUGH.

CLXXXVI. Without entering upon the comparative merit of the different kinds invented by different practitioners, it may be observed, that one who knows how to deliver with the forceps may deliver with almost any kind that can be applied, whether straight or curved; but, at the same time, in the form of an instrument for any particular use, we should take advantage of every circumstance in adapting it to the shape of the parts to which it is to be applied, as well as in attending to its general form or principle.

CLXXXVII. From these general observations, we proceed to enter upon the particular method of using the forceps, and the situations of labour to which they are most applicable.

In the first place, being merely artificial hands, the use of the forceps should never be concealed from the patient, and the appearance of them will always be rendered less alarming if they are covered with leather. The danger of communicating infection, commonly remarked, is little to be dreaded; and they do not by their

found occaſion that uneaſineſs to the patient which otherwiſe cannot be avoided.

CLXXXVIII. Though the natural preſentation of the head is with the face inclining to the ſacrum, and occiput to the pubes, yet, as we have ſeen in the caſe of protracted labour, this does not always take place. Hence the directions for the uſe of the forceps muſt vary ſomewhat, as adapted to the particular ſituations of preſentation; and theſe have been reduced to three different kinds, or what have been termed varieties, of forceps caſes.

CLXXXIX. The firſt caſe to be conſidered is the natural preſentation, and the ſymptoms here are, "the head having deſcended low down into the pelvis, ſo as to preſs ſomewhat againſt the perinæum; the head itſelf elongated into the conical form, and diſcovering more or leſs a ſoft tumour on the preſenting part; the ſtrength of the patient exhauſted, as marked by the ſtate of the pulſe and general appearance."

CXC. Authors, in mentioning the proper time for the uſe of the forceps, have ſpecified a certain number of hours for the patient being in labour, after the complete dilatation of the uterine orifice, and evacuation of the waters. This time has been generally ſtated to be from 36 to 48 hours; but it is by no means a juſt method of aſcertaining when the forceps are indicated, as many women will ſuffer as much in a few hours as others in as many days; and it is therefore the preſent ſtate of the patient, with a conſideration of the former progreſs, and force of the labour, that is to determine our conduct. For the head may be 48 hours in the pelvis,

where the detention arifes merely from weakneſs, not any real diſtortion, and yet the child be delivered naturally. At the ſame time, the longer the forceps can be deferred the eaſier will be their application.

CXCI. The ceſſation of the labour pains has alſo been regarded as a mark of the proper time for the application of the forceps; and that, while they continue, we ſhould not have recourſe to them. But this rule, though proper in caſes where from early exertion the patient becomes exhauſted, yet will by no means apply in general: for, though long ſuſpended, they come often to be renewed with ſucceſs.

CXCII. Of forceps caſes, perhaps more than one half occur among women in low life, where exertions are generally too early employed to expedite delivery; and where the ſtrength comes therefore to be ſoon exhauſted, while the head coming to be rivetted on ſome of the projecting parts, from the over ſtraining of the patient, it does not elongate as where a more gradual deſcent of it at firſt takes place.

Firſt Forceps Caſe.

CXCIII. The head then being at the lower edge of the pelvis, the preſentation natural, and the ſymptoms mentioned (CLXXXIX) indicating the uſe of the forceps, they are to be employed according to the following directions.

1. The ſtate of the preſenting part is to be accurately aſcertained, and the ſituation of the ears of the child; over which the blades of the forceps are to be directed, as giving the moſt proper hold, carefully attended to.

2. In applying the blades of the forceps, the hand muſt be introduced by the lateral part of the pelvis, to direct them; and it has been recommended to be carried ſo high as to touch the ear of the child, over which the blade is to be paſt. This rule, however, though generally inculcated, cannot always be put in practice, for the ſpace of the pelvis, being rather deficient, cannot eaſily admit the hand of the operator for any way. Nay, there are ſome caſes in which the forceps are uſed where the hand cannot be admitted at all, and where the blade itſelf can only be inſinuated in the time of a pain, when the ſituation of the preſenting part is a little altered. Beſides, in a proper forceps caſe, like the preſent, the os uteri is ſo far retracted, that there is little or no danger of including any portion of it in the hold; and the introduction of the hand ſo high gives the patient the moſt ſenſible pain, even greater that what attends the reſt of the delivery. On this account the hand ſhould be introduced ſo far only as can be eaſily done.

3. Previous to attempting the introduction of the blades, it has been recommended by practitioners to ſpend ſome time in the dilatation of the external parts; but their contraction is what we are to expect, and which is not to be conſidered as any obſtacle to the delivery; for, though they are naturally elaſtic, they yield to the dilating power as the head advances in its progreſs; and any previous attempts to make them yield more readily, except merely to introduce the blades, is uſeleſs; for, as ſoon as the dilating power is withdrawn from their natural contractility, they will regain their original ſtate. Hence thoſe practitioners who recommend a particular time, as twenty minutes, or half an hour, to be ſpent in dilating the parts, as they call it, may be accoucheurs, but not phyſiologiſts, as they at the ſame time give much

fruitleſs pain to the woman, which might have been avoided; nay, in all thoſe caſes of natural labour, attended by midwives who are very fond of this practice, and of making always attempts at dilatation, inſtead of more ſpace being gained from the dilatation, the parts become rather more contracted, and occaſion greater efforts from the propelling power, to overcome the morbid contractility and inflamed ſtate they hereby acquire.

4. In introducing the blades, the left hand one is to be introduced firſt, and, in introducing it, attention is to be paid to the different axes which the vagina and pelvis form. On this account it is to be puſhed firſt a little backwards, and then directly upwards, keeping the blade cloſely applied to the ſurface of the head, and bearing the handle as much as poſſible againſt the perinæum, to favour its direction through the axis of the pelvis; and it ſhould be carried ſo high, that its locking part be at the os externum.

5. One blade being introduced, it muſt be kept ſteadily in its place by one hand, while the other is paſt to the oppoſite ſide of the pelvis, to direct the introduction of the ſecond blade, which is to be paſt in a ſimilar manner with the former, and the handles being then brought together, an attempt is to be made to lock them. If they unite eaſily at the locking part, the forceps may be conſidered as properly applied, and we may depend on our hold. In this caſe the blades ſhould be at leaſt an inch and a half diſtant from each other. If they do not readily join at the locking part, or if the handles come too cloſe, they are improperly introduced, and ſhould be withdrawn, as they will either ſlip on attempting the extraction, or injure the patient by preſſing on parts againſt which they are not intended to act.

6. In locking the forceps, avoid incloſing any of the

ſoft parts; and, if they are properly applied, it will ſeldom be neceſſary to paſs any ligature round the handles, to ſecure them, as directed by moſt authors.

7. When the forceps are once applied, the extraction ſhould next be attempted, by pulling as much as poſſible in a direction backwards, or againſt the perinæum. If natural pains occur, advantage is to be taken of them, and their recurrence waited for, to facilitate the progreſs of the head, and no attempts are to be made in the intervals to overcome the reſiſtance; but if no natural efforts take place in pulling, the greateſt exertions ſhould be uſed at firſt, as this action of the blades is chiefly then againſt the parietes of the pelvis. As it advances, and preſſes more againſt the ſoft parts, the exertions in pulling ſhould be gradually leſſened, and their direction ſhould be alſo changed, or more forwards, obſerving always the axis of the vagina. For the ſame reaſon, towards the end, as the occiput begins to riſe from the os externum, the direction of pulling ſhould be almoſt entirely upwards to the pubes, to prevent laceration of the perinæum.

8. In the extraction, it is often long before the head yields in the ſmalleſt degree, and we may continue to pull for ten or twelve minutes before being ſenſible of gaining any advantage, but by perſevering it generally yields at laſt; and when once yielding in the leaſt we are certain of ſucceeding, as the difficulty is then generally overcome.

9. In pulling, care ſhould be taken not to ſqueeze the handles together, as, by proportionally compreſſing the head, it is liable to kill the child, and we ſhould bear therefore more upon the locking parts than the blades themſelves.

CXCIV. After giving these rules, it is to be observed, that the chief difficulty in using the instrument is in ascertaining the proper situations to which it is applicable, and in introducing the blades so as to procure a proper hold; for, in the extraction itself, there is little difficulty if the exertions are continued slowly and steadily.

CXCV. On the introduction of the forceps the patient generally complains a good deal of pain and cramp of the thigh, from the increased pressure which is liable to occur. These symptoms very quietly abate; but, as it is necessary to show the patient that they do not arise from you, you should allow some time, before attempting the extraction, after the blades are applied.

CXCVI. The rules for using the forceps have been extended by many authors to too great a length, which is rendering the instrument much more complex than it really is; for, if considered in its proper light, merely as artificial hands, there is no occasion for viewing their application as a subject of such difficulty.

Second Forceps Case.

CXCVII. From the natural presentation we come to consider the variety taking place where the forceps are employed; or where, instead of the former position, the head, not having descended so far, the ears are placed to the pubes and sacrum; or even, although having descended so far, the same position takes place, from the confinedness of the pelvis not allowing the head to make the necessary change in its descent. This position is

termed the Second Forceps Caſe, and here the inſtrument is frequently known to fail. To render its application however more eaſy, the poſture of the patient ſhould differ from that recommended for the natural preſentation; for, by placing her on her ſide, it will be found eaſier to introduce the blade betwixt the pubes and head, which is the moſt difficult one to apply.

CXCVIII. Having placed the patient then in the proper poſition, you endeavour to carry the fingers of one hand ſo high as to get betwixt the ſymphyſis of the pubes and the head, on which one blade of the forceps is to be introduced, keeping the handle towards the inſide of the patient's thigh, and thus carrying the blade a little tranſverſely. In the ſame manner, having introtroduced the hand on the oppoſite ſide, or betwixt the head and ſacrum, on it direct the ſecond blade, carrying its handle in the ſame poſition with the former; after which, let an attempt be made to lock the blades, when you will find if they are properly applied.

CXCIX. Before proceeding to the extraction, it will be neceſſary in this caſe to give the forceps a turn, in order to bring the head into the natural poſition, or hollow of the ſacrum, and thus to take advantage of the dimenſions of the pelvis. This, however, ſome authors conſider as unneceſſary; for the head turns gradually as it makes its progreſs through the pelvis; ſo that, though the forceps, when firſt applied, have their blades towards the pubes and ſacrum, they will gradually turn to the ſides of the pelvis, before the head is delivered; and the action therefore of the forceps muſt be firſt and chiefly with that blade towards the pubes, till it comes to a reſt. As ſoon as the head falls into the hollow of the

ſacrum it is then placed in the natural poſition, and the ſame rules are to be attended to as in delivering the firſt caſe.

CC. In theſe caſes, if you fail with the forceps, as may happen, ſome practitioners have adviſed that you ſhould ſtill wait before having recourſe to any further means, for the natural efforts may ſtill perhaps, in the end, ſucceed. This opinion is no doubt dictated by humanity: it is not however a maxim of prudence, or what will guide moſt accoucheurs. Wherever you have recourſe to inſtruments, you muſt deliver. If you fail, it is attributed to your ignorance; and on this account no practitioner ſhould think of uſing them without he is certain of ſucceſs.

Third Forceps Caſe.

CCI. Of forceps caſes two other varieties ſtill remain, which have been marked by authors.

Inſtead then of the face inclining to the hollow of the ſacrum, we find it ſituated in the oppoſite direction, or towards the pubes. In this caſe, if circumſtances ariſe, which render it unavoidable to expedite delivery, the blades are to be applied in the ſame manner as in the natural poſition, and the extraction is to be accompliſhed by bringing along the head in the ſame poſition in which it preſents, without attempting to make any turns to alter its direction, as recommended by ſome authors. In this caſe, however, we ſhall find the forceps frequently ſlip, and it will be therefore prudent to avoid applying them here, whenever it is in our power.

Face Cases requiring the Forceps.

CCII. The last situation in which the forceps may come to be employed is in face cases. These we already observed are very rare, and, if present in the beginning of labour, may be altered according to the rules formerly laid down: but if the labour is advanced without attempting this alteration, and the head engaged in the pelvis, while circumstances urge the delivery, the forceps may be applied, with attention to the rules which have been already detailed; though in face cases, one blade of them, or the lever, may be successfully employed to alter the position; and where the patient is not exhausted, the delivery will then follow by the natural efforts alone.

CCIII. Some authors, as BAUDELOQUE, have enumerated an almost endless variety of forceps cases. That every point of the two diameters of the head affected by labour, or the cranium and face, may present, there is no doubt; but such a minuteness can serve no good purpose; for if the situations detailed are understood, the rules of delivery will apply to every one else.

3. *Crotchet and Scissars.*

CCIV. But where the pelvis is so contracted, that the introduction of the forceps is unsafe, or where, though introduced, the force required for extraction cannot be safely employed, the second method of delivery had recourse to by practitioners, and directed by an attention to the safety of the patient, is the application of

ſuch inſtruments as, acting in a different principle from either of the former, by diminiſhing the ſize of the preſenting part, allow it to be either afterwards expelled by the natural efforts, or, where theſe are not to be waited for, extracted by art.

CCV. Thus protracted labour may be divided into three degrees.

In the firſt, where the powers of nature, though ſlowly exerted, are yet ultimately equal to the accompliſhment of delivery.

In the ſecond, where the lever or forceps are required, but by which the life of the child is ſtill preſerved; and,

In the third, where the cauſe of protraction is ſuch, that, by the contraction of the capacity of the paſſage, the head of the child is not permitted to paſs unopened.

It is this laſt we ſhall now attempt to examine.

CCVI. From examination then of the ſize of the fœtal head, compared with the dimenſions of the pelvis, allowing for the difference which neceſſarily takes place in different children, the ſmalleſt poſſible diameter to which it can be reduced by compreſſion is about three inches. Hence every pelvis, the ſuperior aperture of which is below three inches, cannot admit its paſſage without alteration of its ſize. This, then, may be conſidered as the ſtandard meaſure; but though proper to particulariſe the exact limits, it muſt be allowed at the ſame time to be of very little importance in practice, as the ſtate of the patient, and progreſs of the labour in a given time connected with it, direct entirely our treatment.

CCVII. Wherever, after the complete dilatation of

the os tincæ, and rupture of the membranes, the head continues ſtill above the brim of the pelvis, or deſcends only a little into it, with a ſoft tumour forming on the preſenting part, while the bony ſpace or bulk of it remains very high—ſo ſoon as the patient's ſtrength begins to fail, that is, ſo ſoon as the pulſe, countenance, and other appearances indicate extreme debility, and reſemble thoſe of a perſon worn out with diſeaſe, you are then authoriſed to have recourſe to ſuch means as will diminiſh the ſize of the preſenting part, and allow it to paſs, previous to which, by the introduction of the hand, you will have aſcertained the exact nature and degree of the diſtortion.

CCVIII. The deſtruction of the child, which muſt inevitably take place, is the great obſtacle to this mode of delivery; and it has been uſual on this part of the ſubject for writers to enumerate thoſe ſigns which diſtinguiſh its ſtate in utero; for where dead, the obſtacle to its performance is then removed. But if the neceſſity for this operation is once clearly indicated, what occaſion is there for determining this. Profeſſional duty muſt always riſe ſuperior to every feeling; and this anxiety to determine the ſtate of the child before-hand ſhews that practitioners have often performed the operation when there was no actual neceſſity for it, being determined to this ſtep merely by the apparent death of the child. But this conduct is never warrantable; and, without being unavoidably indicated, is never to be allowed, whatever the preſumption may be. We ſhall not, therefore, as ſome authors have done, endeavour to undervalue the life of the child before birth, to render the appearance of this operation leſs dreadful. The loſs of the child, in every caſe of this kind, is to be conſider-

ed as a ſevere ſtroke; and, without attempting to alleviate it by ſuch modes of reaſoning, it is rather the taſk of humanity to regret with the parent the unavoidable neceſſity which urges it; but ſtill to retain that firmneſs neceſſary to put it in execution. If the former reaſoning is conſidered, by withdrawing the horror which ſhould neceſſarily attend the operation, it is giving practitioners a pretext for performing it when there is no abſolute occaſion; or it is an attempt to blunt the feelings of the man, from a fear of his being incapable of executing his duty in ſuch a ſituation;—on theſe accounts, Dr. OSBORNE's reaſoning, however ingenious and plauſible, muſt be condemned.

CCIX. The child we find loſe its exiſtence, either during the latter end of geſtation, or in the progreſs of labour.

The ſymptoms which have been regarded as diſtinguiſhing it during the firſt period are,—

1. The ſudden ceaſing of motion, formerly ſtrongly felt, and that commonly with much ſtruggle.

But this ſymptom is attended with much uncertainty; for many women have little or no motion during geſtation; even the action of ſome of the viſcera occaſions ſenſations to be felt that are eaſily miſtaken for the motion of the child.

2. The ſecond ſymptom is ſlight hæmorrhage from the uterus, when this accident takes place, and immediately departing; but this is by no means conſtant.

3. No ſenſible increaſe of bulk perceived from the time theſe ſymptoms commence; and a ſenſe of coldneſs, particularly in the abdomen, communicated to the parent.

4. Putrid exhalations from the vagina in labour, with the diſcharge of meconium on the rupture of the waters, and the head from the time of being firſt touched, poſſeſſing a ſoft puffy feel. But even where theſe ſymptoms have all appeared previous to birth, the child has yet been delivered alive,—and therefore nothing is ſo unconcluſive as deciding on this point; for though ſuch ſymptoms afford a preſumption, yet they by no means convey an infallible proof.

CCX. In the latter period, labour has generally advanced for ſome time before the death of the child occurs, as entirely depending on the degree of compreſſion it ſuffers; and therefore the common ſymptoms of the want of motion and abſence of pulſation in the fontanel cannot eaſily be truſted to; for,

1. Spaſmodic affections, which happen in labour, may at this time be miſtaken for the motion of the child; or the uterus, contracting rigidly round the body, may prevent any motion after the rupture of the membranes has once taken place..

2. When the labour has advanced, at which time the death of the child happens, a tumour being generally formed on the head, and the teguments thickened, the pulſation of the ſinus cannot be felt; nay, even when ſuppoſed to be felt, the pulſation of your own finger, from the reſiſtance of the teguments when preſſed againſt the head, may deceive you, while ſymptoms of putridity do not occur here time enough to give evidence of this ſtate.

Hence, all the circumſtances inſiſted on by authors on this ſubject are at beſt fallacious; and till the child is once expelled, we have no certain evidence of its real ſtate.

CCXI. A frequent effect of the death of the child during pregnancy is a morbid enlargement of the size of the head, and that either in consequence of putrefaction or disease.—Hence, even where the pelvis possesses its proper dimensions, it may be necessary to have recourse to this operation, to admit delivery.—When this enlargement proceeds from putrefaction, the whole of the body is generally emphysematous, and the same means which are had recourse to for the delivery of the head must be likewise employed in order to bring away the rest of the body. Where the head alone is affected, it is generally from hydrocephalus. Children under this disease are generally delivered without any particular assistance being required, the texture of the head being so softened by the contained fluid as to yield to the pressure taking place in delivery; but where the collection is accumulated beyond a certain degree, this does not happen, and the labour being protracted beyond a proper length requires immediate delivery.—This disease, it has been alleged, we can generally detect by the distance betwixt the sutures; but this in labour is impossible, as where any degree of pressure takes place the sutures are not to be felt, and this will the more readily happen in hydrocephalus, as, from the texture of the head, it yields much more easily to compression. It is only therefore from the state of the patient, and the progress of the labour, particularly its last stage in a given time, that our mode of treatment is to be directed. Hence it is a matter of little consequence on what the cause of protraction depends, provided the present circumstances indicate a necessity for delivery.

CCXII. After these observations, we come to consider the method of accomplishing this species of instrumental

delivery; and the inſtruments beſt adapted for performing it are the long ſciſſars and crotchet.

CCXIII. Diſproportion betwixt the head and pelvis, though known to the ancients as a cauſe of protracted labour, does not ſeem to have led them to form any juſt indication for removing it. How to account for this we are at a loſs, for the invention of the long ſciſſars is very modern. It would ſeem that they conſidered either the head of the child ſo ſoft as to yield on the application of force to extract it, without any diminution of its ſize, or that the bones of the pelvis would ſeparate, to allow an enlargement for its paſſage. Hence their great object was to obtain a proper hold of the preſenting part for extraction; and with this view hooks of different kinds, knives for making inciſions to fix theſe hooks, and other inſtruments on a ſimilar principle, came to be invented. In peruſing different writers, numberleſs views are met with of ſuch inſtruments.

CCXIV. The great point in every delivery of this kind is the diminution of the ſize of the part, before any ſuch modes of extraction can be ſucceſsful. For this operation, therefore, the long ſciſſars and crotchet we conſider as the moſt proper yet invented; and the blunt hook, though an aſſiſtant to the latter, and ſometimes uſed for it, is almoſt never neceſſary.

CCXV. In forming the long ſciſſars, they ſhould be at leaſt ſix inches in length. They ſhould have ſtops to determine the depth of their perforation, and they ſhould be no ſharper in the points than what is merely ſufficient for perforation. Their ſides ſhould be entirely blunted, and the more they act by tearing than by

cutting is preferable, as the bones of the head are thu the more deſtroyed. It is on this principal the inſtru ment has been improved by Dr. DENMAN, and its ap plication rendered ſafer.

CCXVI. The crotchet, again, was originally mad ſtraight; but it is now generally formed with a curve, firſ given it by MESNARD, a French accoucheur: but this i by no means ſo neceſſary, as modern practitioners alway prefer its application on the inſide of the head, within th opening; and this curve would rather ſeem to proceed on the idea of its application taking place, ſimilar to the forceps on the outſide of the cranium; nay, the curve renders it rather more difficult in the application. It ſhould be alſo longer than it is commonly made; for the more of lever it poſſeſſes, when applied, it will be found the eaſier to extract.

CCXVII. Having then, from the ſtate of the patient and progreſs of the labour, determined on the propriety of the operation, before proceeding to the ſteps of it, it is prudent to point out to the huſband and friends of the patient the neceſſity that urges you to ſuch a mode of practice, and to prognoſticate at the ſame time an unfavourable opinion of its iſſue.

CCXVIII. The firſt ſtep in this, as formerly detailed in directing the uſe of the forceps, is in adjuſting the poſition of the patient. Much depends on this for the eaſe of the delivery. All authors have recommended it to be on the back, as in uſing the forceps; but by this poſition you loſe a great deal of the advantage you might otherwiſe gain. In all caſes of diſtortion, it was mentioned, it is only a ſmall portion of the head that enters

the pelvis. Where the patient is placed on her back, your hand is introduced in an unfavourable manner to reach the preſenting part, and you cannot get it ſufficiently high without difficulty, to have a full command of it. But where the patient is placed on her knees and elbows you reach the head at once, the pelvis being placed in a direction more favourable to the introduction of the hand, and parallel with it. In theſe caſes too, where the patient is on her back, in making your perforation, you unavoidably preſs more upwards, and conſequently bear ſtrongly againſt the ſymphyſis. In the other ſituation you preſs more directly againſt every part of the pelvis, as being placed more horizontal, and not ſo much againſt any ſingle point. This advantage has been taken notice of by the late Dr. YOUNG in a curſory manner; but he has not inſiſted on it ſo ſtrongly as is neceſſary, and he confines it merely to a few caſes, where he had failed by placing the woman in the common way. It deſerves, however, to be more generally recommended, as much facilitating this operation; and unleſs the patient is ſo much exhauſted as to be unable to bear an alteration of her poſture, it ſhould never be diſpenſed with.

CCXIX. Having thus adjuſted the poſition of the patient, you next proceed to the operation itſelf, which is properly divided into two ſtages, conſiſting of—

1. The diminution of the head; and,
2. Its extraction.

CCXX. The firſt is generally the moſt ſimple. It is performed by introducing one hand laterally through the pelvis till it reach the head. On the direction of this hand the long ſciſſars are to be introduced; and before

making a perforation, a ſoft part of the head is to be choſen, if poſſible, particularly the fontanel. If this, however, cannot be diſcovered, the ſciſſars are generally ſufficiently ſtrong for perforating any part. When the perforation is once made, which ſhould be for ſuch a depth into the head, till prevented from paſſing farther by the ſtops, the hand that directed their introduction is to be withdrawn from the pelvis, while the points are prevented from doing any harm by retaining the ſciſſars in the ſituation which they gained on perforating the cranium.

In order to make the opening large, the handles are then to be drawn aſunder, for at leaſt the extent of three inches, by which the head will come to be torn open; and by turning them in every direction, while their handles are thus extended, the cavity of the cranium will have its texture pretty fully deſtroyed. The handles are then to be brought together, in order to ſhut them, without changing the ſituation of their points; and the hand being introduced, to guard the latter, they are to be withdrawn, in the ſame cautious manner as formerly introduced. If the opening made by this perforation is not ſufficient to deſtroy the texture of the head, a ſecond perforation is to be made in ſome adjoining part of the cranium, and enlarged in the ſame manner with the former, ſo that the two may come to communicate. After the opening into the cranium is made, as the adheſions of the brain ſtill keep it from fully collapſing, the latter are to be deſtroyed, by the introduction of a ſpoon, or any blunt inſtrument, within its cavity.

CCXXI. Though the introduction of the long ſciſſars in making the perforation for the depth of their

ſtops is a general rule obſerved by all practitioners; yet in ſome caſes, where, from the violence of the previous labour, and the degree of compreſſion the head ſuffers, a large tumour forms on the preſenting part, you are obliged to go much farther; and the beſt rule to know if you have entered the cavity of the cranium is by the quantity that comes to be effuſed by the deſtruction of its vaſcular texture.

CCXXII. After the opening is once made, before proceeding to extraction, all the looſe bones muſt be carefully ſeparated, which are liable to hurt the patient in the delivery, and the opening muſt be covered as much as poſſible by the remaining teguments of the head brought over it.

CCXXIII. Though it may not be neceſſary in every caſe to deſtroy entirely the ſtructure of the head, as a ſmall diminution of ſize may admit delivery, yet, as you are uncertain what difficulties may occur to the extraction, it is proper you ſhould diminiſh it as much as poſſible at firſt.

CCXXIV. This, then, we conſider as the firſt ſtage of the labour, and the only difficulty in this part is the getting properly at the head, for the diminution of its ſize is ſufficiently eaſy. The next ſtage, however, or the extraction, is often more perplexing.

CCXXV. When the head is once fully opened, it has been recommended, as an improvement in modern practice, if the patient's ſtrength at all permit, to allow the head to collapſe, and to be expelled by the natural

efforts. This, perhaps, is carrying an attention to the efforts of nature too far, and rather tantalising the patient, after suffering so much. Besides, after operating so long as takes place on opening the head, if the child is not removed, the patient supposes it owing to some failure on your part. She becomes apprehensive; and the pains, for that reason, independent of the suspension they suffer from the operation, are very long, if ever they return.

CCXXVI. Instead of this practice, then, the crotchet should be immediately introduced into the opening, on the inside of the cranium, and fixt, if possible, on some projecting point, which may give it a proper security, and prevent its slipping, the foramen magnum being particularly recommended. When it cannot be fixt there, it is to be done wherever it is practicable, though it very often slips. Some practitioners have considered this as an advantage; for the head they tell you becomes more lengthened out; but if we reflect on the consequences that may arise from this slipping, we shall be induced to think otherwise; while, if the head is sufficiently diminished at first, there will be less necessity for trusting to such an advantage.

CCXXVII. In introducing the crotchet, it must be always guided in the same manner with the long scissars; and while pulling, the hand must likewise be kept in the pelvis, both to assist the extraction, and to prevent any danger happening from the accidental slipping of the crotchet. When slipping, it is to be withdrawn, the separated pieces of bone being removed, and introduced anew, in the same guarded manner as at first.

CCXXVIII. Proceeding on the practice here laid down, wherever there is ſpace allowed for the introduction of the hand to open the head, there is almoſt no caſe but what you will ſucceed in, if you take time and are cool in your proceeding. It is alſo amazing what the parts, habituated to the previous preſſure during the labour, will bear; and there is ſeldom much danger, after ſuch deliveries, where no lacerations have taken place.

CCXXIX. In ſome caſes of this kind, the whole bones of the cranium will be torn away, before the head will yield, or you can procure a proper hold with the crotchet; and even, when the head yields, the ſame difficulty that prevents its paſſage hinders likewiſe the progreſs of the ſhoulders; and, therefore, after the head has been completely torn to piece, it has been found neceſſary to fix the crotchet under the axilla, or in the thorax, to procure the extraction. Theſe caſes, however, are more rare; but it ſhews that general rules will not apply in the uſe of inſtruments, and that the conduct of the practitioner muſt be directed by the circumſtances of the caſe. The great point, in all ſuch ſituations, is not to loſe temper, and to lay it down, as a fixt maxim, never to forſake your patient, if once you begin to operate, till ſhe is delivered.

CCXXX. After opening the head, ſome practitioners have adviſed the uſe of two crotchets, in the manner of the forceps, proceeding on the idea of their being fixt on the outſide of the head; but if the application of one crotchet in this way, as was formerly the

practice, was found frequently unsafe, how much more must two be, applied in this manner.

CCXXXI. In describing the use of the crotchet, some authors have endeavoured to limit the time of a delivery by it to the space of two hours. Such rules, however, are ridiculous. Every accoucheur knows that he is often able to perform it in half the time; and, on other occasions, that it may require a much longer period. Besides, it is not to be supposed, that any practitioner will choose to keep his patient a single minute longer in pain than he can avoid. This maxim, therefore, though probably just, at times will have very little attention paid to it at the bed-side.

CCXXXII. From the unavoidable cruelty that attends the use of the crotchet, in sacrificing the life of the child, different proposals have been made to supersede the necessity for it in future deliveries; and this has been attempted to be done in three ways, either—

1. By the management of the patient, during pregnancy, so as to prevent a complete evolution of the child, or retain it of an imperfect growth.

2. By a premature occurrence of labour, while its size is yet small; or,

3. By the enlargement of the pelvis itself, to admit its passage, of the ordinary size.

CCXXXIII. The first is attempted by frequent small bleedings during gestation, an abstemious regimen observed by the mother, and other modes of inanition. Such authors, however, as have proposed this method, have not reflected on two circumstances which shew

the inefficacy of ſuch a mode of treatment. In the firſt place, the ſmalleſt and moſt debilitated women have frequently the largeſt children, which demonſtrates that the growth of the fœtus does not depend on the ſtate of the mother; and, ſecondly, the nouriſhment is derived from the placenta, or the temporary appendages of the uterus. Hence, it muſt be their ſtate, not that of the general ſyſtem of the patient, which muſt determine the increaſe of the fœtus; and their ſtate it is not in our power to alter, while the debility induced by ſuch a mode of treatment, during pregnancy, renders the patient incapable of bearing the fatigues of labour, or that method of aſſiſtance which may be neceſſary to the expulſion of the child.

CCXXXIV. The bringing on premature delivery has been often propoſed, and, in ſome caſes attempted, though not with that ſucceſs which, from ſuperficial conſideration, we might expect. It proceeds on that obſervation of children frequently ſurviving, when born in the 7th or 8th month, while the oſſification of the head is then ſo looſe, as well as its ſize ſmaller, that it can bear a degree of compreſſion at leaſt one third more than at full time, and the patients have been known to recover equally well as after a delivery at full geſtation. But if we reflect on this propoſal, many objections may be offered to it.

1. In the firſt place, we cannot aſcertain the exact period of geſtation, and hence the period when this delivery may be properly attempted is uncertain.

2. The ſize of children, in different pregnancies, vary much in the ſame ſubject; and they are frequently born in the 7th or 8th month equally vigorous as at the full time.

3. The ſucceſs of delivery, at a premature period, is oppoſed by ſeveral circumſtances; for,

4. The extenſion of the uterus has not fully taken place, conſequently a reſiſtance muſt be formed by the action of the cervix to the action of the fundus, rendering the labour tedious and painful.

5. The early excluſion of the waters, with this view, before the uterine orifice has been in the leaſt dilated, will increaſe the former difficulty; and,

6. The child itſelf, from the tediouſneſs of the labour, and its own imperfect ſtate, may ſuffer ſo much by the increaſed action of the uterus, neceſſary to effect it, as to terminate its exiſtence in the courſe of delivery, while, to the patient herſelf, there is always danger of conſiderable hæmorrhage, which may render it neceſſary, for her ſafety, to haſten the delivery, without regard to the ſituation of the child.

CCXXXV. For the reaſons then detailed, as the ſucceſs of this practice, in the moſt favourable circumſtances, is precarious, from our uncertainty of the ſize of the fœtal head, and the exact degree of diſtortion in the pelvis, and as real danger for the moſt part attends it, it is a ſtep that cannot, with any degree of prudence, be imitated; and though it may have ſucceeded in a few caſes, they by no means deſerve to be followed; or it requires a previous knowledge of the circumſtances of the caſe, much greater than what can be uſually acquired by the common attendance on labour.

CCXXXVI. Conſidering theſe methods as ineffectual to ſuperſede the neceſſity for the uſe of the crotchet, an attempt has been farther made to enlarge the capacity of the pelvis with the ſame view.

Operation of the Symphyſis Pubis.

CCXXXVII. The ſeparation of the ligaments of the pelvis in labour was an opinion long entertained by the firſt accoucheurs; and which, ſtill to this day, with many modern practitioners, gains credit. The ancients conſidered it as depending on a general relaxation of the whole ligaments of the pelvis previous to labour. The moderns, who favoured this opinion, have confined it to the ligaments which form the junction of the pubes, and conſider it as occurring during the efforts of delivery. Reflecting, then, on theſe circumſtances, which were known to former anatomiſts, and particularly on the opinion of the ſeparation of the pubes, Mr. SIGAULT, a French ſurgeon, firſt from theory, propoſed that this natural ſeparation ſhould be extended in caſes of diſtortion, by a diviſion of the ſymphyſis in time of labour. This propoſal was firſt made to the Royal Academy of Surgery, but for ſome time rejected. Whatever cruelties might be exerciſed on the child, practitioners were hitherto averſe of extending theſe to the parent; and while the invention of crotchets and inſtruments of all kinds met the approbation of the profeſſion at all times, they heſitated giving a ſanction to an attempt which threatened entirely the life of the mother. Mr. SIGAULT, an enthuſiaſt in his diſcovery, and convinced of its practicability from his frequent performance of it on the dead ſubject, where he informs us no leſs than two inches of enlargement were gained, eagerly ſought an opportunity of ſubmitting it to the teſt of real practice. A caſe at laſt occurred of this kind. A woman, who formerly had had difficult labours, and been delivered of dead child-

ren, anxious to preſerve her offspring, readily embraced a propoſal, the danger of which, from the repreſentation of Mr. SIGAULT, was trifling; while its ſucceſs gave in future a proſpect of more eaſy deliveries. The operation was accordingly performed, and a living child extracted. A ſpace of two inches and a half was gained, according to Mr. SIGAULT's report, by the diviſion; but the recovery was tedious, and ſhewed that the operation was not without danger. This had been formerly hinted at by the Royal Academy of Surgery, and to obviate it, experiments had been made by profeſſor CAMPER, of Holland, on animals, where the diviſion of the ſymphyſis was completely healed in eight days.

CCXXXVIII. In ſpite of the tedioufneſs of SOUCHOT's recovery, this operation was conſidered as a new improvement by the academy. Nay, they even went farther; and liable to extremes as they had formerly condemned it without trial, they now over-rated its merit on a very inſufficient proof. The conſequence of their applauſe was the conveying a favourable idea of the operation through many parts of Europe. Thus it has been performed upwards of twenty-five different times. But in the greater number of theſe caſes, the proper indications for the operation were not pointed out; and the operation, therefore, was more a matter of choice than neceſſity, ſo that its merit was by no means proved by theſe caſes.

CCXXXIX. This operation, when firſt hinted at by Mr. SIGAULT, he conſidered only as capable of ſuperſeding the uſe of the crotchet; but the ſucceſs of SOUCHOT's caſe led him ſoon to entertain too high an opinion of it; and its merit was accordingly extended ſo far, as to be

conſidered as ſuperſeding the neceſſity for the Cæſarian operation, and capable of admitting delivery in any ſituation of diſtortion whatever. But it is only after ſome years that the true merit of an invention can be aſcertained, when that enthuſiaſm is over that diſtinguiſhes the reports of its favourers, and when envy has no longer any intereſt to detract from its real utility.

CCXL. When this operation was firſt applauded by the encomiums of the Royal Academy, ſeveral authors appeared againſt it, actuated more by private pique than from a real eſtimation of its intrinſic merit. It became, indeed, at Paris a party work; and we can truſt, therefore, leſs to the accounts of the French writers than thoſe authors who have tried it in different other parts of the continent; and, from their obſervations and experiments, our eſtimate of the operation is as follows:

1. Even allowing that the ſuperior aperture of the pelvis is enlarged by the diviſion, it does not take place to that extent, as to admit the head to paſs; where the pelvis is in any degree diſtorted, both as from the figure of the head it does not derive any advantage from a trifling enlargement of ſpace, which, were it more circular, it would do, and alſo as the diviſion cannot be extended far, without endangering the ſacro iliac ligaments, and occaſioning lameneſs.

2. Suppoſing it even adequate to ſuperſede the uſe of the crotchet, the uncertainty of the life of the child, after the head has been ſome time compreſſed in the pelvis, at which period of labour only its performance is warrantable; and the conſequences that may reſult from the operation, and which have appeared in all the caſes of it hitherto very ſerious, render it an expedient

ſo unſafe, and at beſt precarious, that it can never but be viewed as a piece of wanton cruelty.

CCXLI. The method of performing this operation is very ſimple. It was done by SIGAULT, by dividing the teguments and linea alba, beginning at the upper and central part of the ſymphyſis pubis, with a common biſtoury; after which, introducing his forefinger as a direction, he cut through the ligaments and cartilage; immediately on the completion of which, the two oſſa pubis, with a peculiar noiſe, ſpontaneouſly ſeparated.

CCXLII. In Britain, this operation has happily never been performed; and that owing much to the early diſapprobation of it by the late Dr. HUNTER, whoſe remarks tended to place its merit in a very low eſtimation, as a ſuccedaneum for the Cæſarian operation; and, in any other light, it is never to be thought of. The favourable opinion which authors firſt entertained of it aroſe from the reflexion that the moſt frequent ſpecies of diſtortion depends on the contraction of the tranſverſe diameter of the pelvis at the brim, or from pubes to ſacrum; and the diviſion of the ſymphyſis, therefore, promiſed, by removing this in part, to leſſen the difficulty; but, though leſſening it in part, in caſes of high diſtortion, where alone this operation is warrantable, it is ſtill entirely ineffectual for admitting delivery; and independent of this alſo in ſuch ſtates of the pelvis, its proper elliptic form becomes greatly changed, by which its relation in general, as well as at the place of diſtortion, to the head, is altered, when compared with the natural ſtandard figure. It is an overſight of theſe circumſtances which renders many ſtill ſanguine in their expectations from the performance of this operation.

CCXLIII. To favour this operation, the conſequences of it alſo have been repreſented as very ſlight; but allowing that in one or two caſes they were ſo, wherever, on dividing the ſymphyſis, the head then does not eaſily deſcend, a farther attempt muſt be made to extend the opening by the ſeparation of the thighs, by which the adjacent parts of the pelvis muſt neceſſarily be more or leſs torn, or at leaſt ſeparated from their connexions, independent of the accidents that may happen in the diviſion of the ſymphyſis itſelf, by the incautious uſe of the ſcalpel. Hence will ariſe incontinence of urine, lameneſs, and other painful effects of this operation, which of themſelves are ſufficient to occaſion its being rejected by every practitioner of humanity. Nay, allowing that the head can paſs by the diviſion of the ſymphyſis, the ſoft parts, without the protection of their former bony connection, muſt ſuffer unavoidably from its deſcent, and that even to ſuch a degree as to prove fatal.

The laceration of the urethra itſelf is one of thoſe accidents which, to every practitioner of experience, cannot be too ſtrong an argument againſt any operation of this kind, even on its moſt favourable circumſtances. When happening at times after the uſe of the crotchet, from the acrimony of the urine ſuch a degree of inflammation is continued, as prevents it from almoſt ever healing; and it is one of theſe opprobria of the accoucheur which is reckoned the moſt perplexing that is met with in the courſe of practice. In the preſent caſe, the inflammation is particularly increaſed by the expoſure of the cavity of the pelvis to the external air, by which the ſurface of the wound, inſtead of ſhewing a tendency to unite, acquires the ulcerative diſpoſition continuing to extend, while the inflammation of the adjacent

parts rapidly proceeds. An acute fever, as a conſequence, is produced, which either proves fatal, or the parts, after a courſe of time, becoming callous, the effect of their ſtate on the ſyſtem in general gradually abates,—and the patient ſurvives, reduced by the diſeaſe to the moſt uncomfortable ſituation that can be well imagined.

CCXLIV. When we examine the hiſtory of the different caſes in which SIGAULT'S operation has been performed, it is ſurpriſing to find one half of them on ſubjects in whom no real neceſſity for its performance occurred, and in whom, had time been allowed, the natural efforts would have been ſufficient for the delivery. Nay, we find in the hiſtory of SOUCHOT'S caſe, by SIGAULT himſelf, that he performed the operation previous to the commencement of labour,—a ſtep, which even allowing the operation to be juſt at this period, is not warrantable; that he then introduced his hand into the os uteri, broke the membranes, and delivered the child by the feet. He does not mention any particular difficulty he met with in the extraction of the head; and as every practical accoucheur knows, that even in a well-formed pelvis the extraction of the head, in a footling caſe, is often troubleſome, while the ſpace acquired by the diviſion is now aſcertained to be very trifling, one of two things muſt have occurred here, either the child muſt have been very ſmall, or the pelvis muſt have been very well formed.

With reſpect to the firſt of theſe, it is obſerved by ſeveral authors, that the child was uncommonly ſmall; and in regard to the ſecond, it is a known fact, that ſeveral of the ſubjects on whom this operation was per-

formed were afterwards delivered naturally; and conſequently we are led, from the hiſtory of this operation, to infer, that obſtetrical knowledge muſt either be in a very rude ſtate on the continent,—or as this is not the caſe, that a ſtrong prejudice in favour of novelty has miſled the judgment of ſome of the firſt accoucheurs of the preſent day. The only writers who have favoured this operation in Britain have done it from theory, and from performing it in the dead ſubject, a ſituation where any force can be applied to extend the diviſion; but as the enthuſiaſm for this operation has now ceaſed,—and it is as ſtrongly reprobated by the accoucheurs of Paris now as it was formerly extolled,—it muſt ſink ſoon into oblivion; yet it may be always conſidered as an ingenious attempt, deſerving the applauſe of ſociety, had its merit not been over-rated by the partiality of party, and carried farther than what humanity could warrant.

CCXLV. The late Dr. HUNTER, though early averſe to this operation, and reprobating its general principles, has mentioned one ſituation, a proof of the very candid manner in which he had examined it, in which he ſuppoſes its performance may be of ſervice.

This is in thoſe caſes where the diſtortion is ſo conſiderable as to render the Cæſarian operation unavoidable. In ſuch caſes, he imagines, if the diviſion of the ſymphyſis is early performed, ſo that part of the head, which, from the narrowneſs of the ſpace, would not at all deſcend, is allowed to enter by this ſmall enlargement, it may then be reached by the introduction of the hand, and the delivery completed by the uſe of the long ſciſſars and crotchet. This, however, ſeems in a manner indi-

rectly favouring the operation; the impropriety of which Dr. Osborne has considered, in a late publication, with much justice.

Dr. Osborne's *Improvement.*

CCXLVI. Since the merit of Sigault's operation has thus come to be exploded, in order to have still an expedient for superseding the necessity for the Cæsarian section, the idea of which is always dreadful, an attempt has been lately made to extend the utility of the crotchet; and by an attention to the dimensions of the pelvis, and to the advantage that may be taken of these, hitherto not so much observed to establish its success, even in cases where, till now, the Cæsarian operation was deemed unavoidable. This is carrying it a step beyond what had been hitherto imagined practicable, the merit of which is due to Dr. Osborne. We shall first examine the principles of Dr. Osborne's practice, and then consider the fact by which it is supported.

CCXLVII. Every pelvis, Dr. Osborne remarks, the capacity of which falls short of two inches at the brim, has been considered hitherto as unavoidably requiring the Cæsarian operation to be performed. Being successful, however, in a late case, where the distortion was equally great, Dr. Osborne infers, that the Cæsarian operation, if a similar mode of practice is attended to in such situations, will seldom, if at all, be found necessary; and in the greater number of cases in which we have the history of its being performed, the crotchet might have been found successful, if employed in the manner he directs.

CCXLVIII. The firſt and leading circumſtance of Dr. OSBORNE's practice is the early diminution of the head.

With reſpect to this, it may be obſerved, that in all caſes of common diſtortion, where the crotchet is uſually employed in practice, if this was attempted at the commencement of labour, according to Dr. OSBORNE's advice, there is much reaſon to believe, from what we meet with daily,—viz. ſucceeding deliveries being accompliſhed naturally, where the crotchet, in the ſame ſubject, had been formerly employed,—that the practitioner, to facilitate delivery for himſelf, would often ſacrifice the life of the child, which might have a chance if delay was permitted, though appearances of being born alive ſhould be againſt it. Where again the diſtortion is ſtill more conſiderable, and does not exceed the dimenſions reckoned neceſſary for the Cæſarian operation, though the early opening of the head may be more allowable; yet ſtill ſome objections offer againſt it.

The great difficulty to the uſe of all inſtruments is where the hand is not allowed to be their guide; either from the ſpace being too confined for its introduction, or the head being too high to be reached by it. In a pelvis, of the kind deſcribed by Dr. OSBORNE, if you begin the diminution of the head at the commencement of labour, you have both theſe difficulties to encounter; while the head, from its very moveable ſtate at the time, though ſomewhat retained by compreſſion of the abdomen, is very apt to ſlip on attempting the perforation from your inſtrument. If then you delay till the labour is ſomewhat advanced, and the pains, which are uncommonly ſtrong at firſt in theſe caſes of extreme

distortion, have pressed part of the head a little within the pelvis, it is then secured; and though you have not the advantage of the introduction of your hand to guard the instrument, you can still make the perforation with more safety.

The reason urged by Dr. OSBORNE, that by this means, before the extraction be necessary, putrefaction of the child's body, rendering it softer and more compressible, will take place, by no means deserves much attention. Every practitioner knows the great difficulty in every labour depends on the delivery of the head. Our chief aim then should be, to render the delivery of it as easy as possible; and when once we are in possession of it, we have it always in our power to deliver the body in any situation.

CCXLIX. The second circumstance on which the success of Dr. OSBORNE's practice depends, is the total removal of the cranial bones, previous to the extraction; so that the base of the head alone remains to pass through the pelvis. It is certainly proper, in every case where it becomes necessary to open the head, that its size be completely diminished; but, in cases such as Dr. OSBORNE describes, I must confess it will be no easy matter to do this, and much more so at the commencement of labour, as Dr. OSBORNE directs. The principle however on which he proceeds is very just; for if, as he reports, the whole cranium can be in such circumstances removed, and the base only allowed to remain, the bulk of the head here will not exceed an inch and a half; and by taking advantage of the dimensions of the pelvis, in bringing along what part of the

head remains, we ſhall be able, in very unfavourable ſituations of diſtortion, to effect delivery.

CCL. The third circumſtance recommended by Dr. OSBORNE, as eſſential, is the period of time intervening betwixt the diminution of the head and the extraction.

This has been recommended of late years in all crotchet caſes; and by it, indeed, a chance is given for the head deſcending farther into the pelvis; and it is more with this view, than that a putrefaction of the child's body may take place, that it requires attention; for in the longeſt time which can be allowed for this proceſs, it will be inſufficient, as the body of the child is firmly compreſſed by the uterus, and the excluſion of the air, the great ſource of putrefaction in theſe caſes, takes place in a great degree.

CCLI. The laſt circumſtance inculcated in Dr. OSBORNE's practice is an attention to the direction of the head, when opened, in paſſing through the pelvis. This is to be conſidered as a real improvement, and of which much advantage ſhould be taken in every caſe of diſtortion; for ſince the baſe of the head, when diminiſhed, meaſures only one inch and a half, and ſince the greateſt width of the pelvis at the brim extends betwixt the ilia, if the head, when leſſened ſo far, has its baſe turned to one ſide, thus introducing its ſmalleſt diameter betwixt the pubes and ſacrum, ſo as to paſs entirely laterally, the extraction will come to ſucceed, though not to be accompliſhed in the uſual way.

CCLII. Such are the principles of Dr. OSBORNE's practice in extreme diſtortion. His method is certainly

an improvement, and ſhews to what lengths a knowledge of the dimenſions of the head and pelvis may be applied, with a view to overcome difficulties in labour; yet the caſes requiring ſuch a mode of practice will be ſo very few, that perhaps the chance of the patients will be equally great by the Cæſarian operation as by the crotchet; and it is only therefore avoiding the appearance of cruelty, while we have reaſon to believe the iſſue will be much the ſame. In proof of this you will find, on peruſing Dr. YOUNG's Lectures, ſeveral caſes where, though the limits of the pelvis were not ſo ſmall as thoſe mentioned by Dr. OSBORNE, yet, from the violence neceſſarily employed, even by that experienced practitioner in the delivery, the patient did not long ſurvive. Hence, we muſt conclude, though Dr. OSBORNE has been lucky in the cure he deſcribes, yet it by no means admits ſuch a general application of the practice as he would wiſh to inculcate.

CCLIII. One thing muſt ſtrike every practical accoucheur very much, on the peruſal of Dr. OSBORNE's eſſay,—the eaſe with which he decides on the dimenſions of the pelvis, in the caſe which is the ſubject of his practice. Now, in examining the pelvis, we can judge only from three circumſtances:—

1. From the ſpace the fingers poſſeſs when introduced.

2. From the portion of the head entering the pelvis itſelf.

3. From aſcertaining the dimenſions of the preſenting part, which paſſes through the pelvis in the extraction.

With reſpect to the firſt, if the fingers, when intro-

duced, are not retained in the ſame ſtate after being brought out, you can only gueſs at the dimenſions, not fully aſcertain them. Even the portion of the head entering the brim is a bad rule, as the degree of oſſification will occaſion it to vary, at different deliveries, in the ſame patient. The laſt, therefore, or the dimenſions of the preſenting part, that has paſt through the pelvis, is perhaps the moſt certain; though circumſtances in the head itſelf may occaſion difficulties, while the pelvis itſelf is not ſo much diſtorted as we would be led to imagine from theſe difficulties. The beſt proof of our not being able to aſcertain exactly the dimenſions of the pelvis, during delivery, may be drawn from the different reports of authors on the operation of the ſymphyſis, on the ſpace gained, where the dimenſions of the pelvis, previous to the operation, were apparently much the ſame; and hence too we cannot be too delicate in forming a judgment of the conduct of any practitioner, where we are employed in ſucceeding deliveries; for a patient that has been delivered originally with the crotchet, and which the then circumſtances may abſolutely require, may be afterwards delivered without ſuch aſſiſtance.

CCLIV. But in ſpite of all theſe expedients detailed, the Cæſarian operation may ſtill, in particular circumſtances, be found unavoidable; and, on this account, an acquaintance with its hiſtory becomes highly proper.

Cæſarian Operation.

CCLV. The ſituations requiring the Cæſarian operation, as uſually pointed out by authors, are either—

1. Extreme diſtortion:

2. Rupture of the uterus; or,
3. Sudden death of the mother.

CCLVI. With reſpect to the firſt, where the ſuperior aperture of the pelvis does not meaſure one inch and a half, and where the inferior opening alſo is equally diſtorted, ſo that no room is afforded for the introduction of the hand, the Cæſarian operation muſt be performed; which conſiſts of a longitudinal inciſion through the teguments and ſubſtances of the uterus, with a view to extract the fœtus and its connecting parts.

CCLVII. The origin of this operation is uncertain, and its title we cannot even fix, whether derived from the manner of performing it, or from the firſt child, as contended by ſome authors, Julius Cæſar, to whom it gave birth. The firſt caſes of it that we find recorded are in many reſpects ſo fabulous, that they cannot receive, at the preſent day, any very great degree of credit. From comparing, however, all that has been written on the ſubject, we have many inſtances well authenticated of its ſucceſs; and on that account, however deſperate a means of relief it may be, rather than doom the patient to certain death, we are authoriſed in trying it. In all the caſes in which it has been performed in this country, it has failed, though conducted with every attention, in order to enſure its ſucceſs. It has been much decried by many of the firſt writers on midwifery, who, from motives of humanity, as well as confirmed by its very general fatality, have endeavoured to prejudice mankind againſt its ever being put in practice. But, however juſt in part the reaſoning of theſe gentlemen may be, it is the part of the phyſician in every ſituation, however deſperate, to graſp at thoſe

means which afford the ſmalleſt proſpect of relief; and, as the death of the patient is in theſe circumſtances inevitable, a greater chance is given where it is performed while the patient is yet alive, of the child's being ſaved, than where it is delayed till afterwards.

CCLVIII. The cauſes to which the failure of this operation may be perhaps reduced, are—

1. The exhauſted ſtate of the woman before its performance; and,

2. The irritation produced by the external air on ſuch a large expoſure of the internal viſcera.

CCLIX. To avoid the effects of theſe cauſes then as much as poſſible, certain cautions have been recommended by ſome writers, which conſiſt in—

1. An attention to its early performance, as immediately after the rupture of the membranes; but this we are by no means authoriſed to do, as we are uncertain how far the natural efforts may advance the head, and whether the crotchet may not ſucceed.

2. That no epidemic diſeaſe attack the ſituation in which the patient is confined.

3. That the uterus itſelf be in a healthy ſtate previous to the occurrence of labour.

4. That the conſtitution of the patient be not broken down by previous diſeaſes.

CCLX. From theory, it may be ſuppoſed that the fatality of this operation cannot ariſe from the wound of the uterus; for there is a great difference betwixt a wound made in it and any of the other bowels. It poſſeſſes naturally little ſenſibility, ſimilar to all parenchymatous matter; and the moment it is freed of its con-

tents it returns to its natural ſtate, or contracts with a power ſufficient to ſhut up the orifices of the veſſels, ſo that the hæmorrhage cannot be very conſiderable. Hence in the external inciſion the chief danger muſt be placed. It is ſurpriſing, when the general fatality of this operation is ſo conſpicuous, we ſhould have accounts, in the early writers, of its having been performed repeatedly on the ſame ſubject.

CCLXI. Previous to this operation, certain preparations are neceſſary to be obſerved; as clearing the the bowels of the patient, that ſhe may be as little diſturbed as poſſible for ſome days after its performance, emptying the bladder of urine, and in general paying the ſame attention to the particulars of her ſtate as where a principal operation of ſurgery is to be undergone.

CCLXII. To perform this operation more eaſily, the patient ſhould be placed on a table, or a ſmall couch, in a half lying poſture. The abdomen is then to be laid bare, and all the apparatus neceſſary for the operation is ſimply a ſcalpel, pair of ſciſſars, and a needle threaded to take up any veſſels that may appear in the external inciſion. The place where this inciſion ſhould be made has been diſputed by authors, and it has been done in various ſituations, ſo as to be termed *lateral*, *tranſverſe*, and *umbilical*. The lateral has been the moſt frequent, and the left ſide preferred, as the liver, if enlarged, does not here intervene. The inciſion is begun about half way from the umbilicus to the ſpine of the ilium; though the beſt rule is, without regarding the particular height at which you begin it, to leave ſo much room as to extend your inciſion for eight inches, which will make it ſufficiently large for the extraction.

The reaſons urged againſt this lateral inciſion are,—

1. That accidents are more liable to happen from an opening in this ſituation.

2. There is a greater depth of muſcles to paſs through than where it is performed at the linea alba.

3. At this part there is a danger of cutting ſome branches of the epigaſtric arteries, particularly if your inciſion is carried a little obliquely.

4. From the muſcular ſubſtance divided here, retracting to a greater length, the inteſtines more readily puſh out; and,

5. The opening here is not exactly parallel with the longitudinal axis of the uterus.

CCLXIII. The tranſverſe inciſion has been ſeldomer performed, and does not ſeem ſuch a favourable mode of making the opening as the two others.

CCLXIV. The umbilical inciſion is conſidered by many authors to poſſeſs great advantages over all the others. It conſiſts in dividing the linea alba from the umbilicus, almoſt to the oſſa pubis, taking care, however, to avoid the epigaſtric artery. The ſuperiority alleged to attend the diviſion of the ſituation of the parts in this ſituation is,—

1. That there is leſs depth of ſubſtance to paſs through.

2. That in the diviſion there is little or no muſcular ſubſtance, which is moſt liable to retract.

3. That the diviſion of this ſubſtance, or the ligamentous, is leſs painful; and,

4. The uterus itſelf immediately appears at the opening, without any intervention of the inteſtines, which are here leſs apt to be protruded.

But, though ſuch advantages are gained, other writers urge ſtrong objections againſt the umbilical inciſion; which are,—

1. That the inciſion of the uterus here is more apt, after the operation, to be retracted, or not to be placed oppoſite to the external one, by which the retention of the diſcharge in the abdomen is favoured; and,

2. The ſituation of the bladder of urine, being at this place, favours very much the ſame inconvenience. On theſe accounts the inciſion ſhould rather be carried a little above the umbilicus, than extended down fully to the oſſa pubis. And hence, alſo, the lateral inciſion may be with equal propriety adopted as the umbilical; for more will depend, perhaps, on the management, than on the place of the operation.

CCLXV. The inciſion, wherever begun, is to be carried on ſlowly, till the peritonæum is laid in view; and, before attempting to open it, any veſſels are to be taken up, and an effuſion into the abdomen prevented as much as poſſible. On this account it will, perhaps, be proper, that ſome time ſhould intervene before dividing the peritonæum. The reſt of this operation is to be conducted with the ſame precaution as in hernia. A ſmall perforation is at firſt to be made into the peritonæum; into it a finger is to be carried, and, taking it as a director, the opening extended as far as neceſſary, or the length of the external inciſion, with a pair of ſciſſars. As ſoon as this is done, it has been recommended, before making the internal inciſion, by ſome authors, with much propriety, by the preſſure of the hands of an aſſiſtant to circumſcribe the ſituation of the uterus on each ſide; which will likewiſe have the ef-

fect to prevent in ſome meaſure the deſcent of the inteſtines.

CCLXVI. When the external inciſion is finiſhed, the uterus comes diſtinctly into view, and its different colour from that of the contained parts readily marks it. There is little danger of confounding it with the bladder of urine, particularly if you are attentive to the ſtate of the diſcharge before the operation. The uterus is to be opened in the middle of the ſurface which it preſents; but this opening is to be very ſmall, or only ſo much as to allow the eaſy introduction of the finger; for, from the dilated ſtate of its veſſels, if divided to any extent, fatal hæmorrhage would enſue, even before the extraction of the child. Immediately through this ſmall opening of the uterus the whiteneſs of the body of the child is diſcovered; for the membranes are generally broken long before you perform this operation. The extraction of the child then is the next ſtep, and it is neceſſary for this purpoſe that the inciſion of the uterus be now ſomewhat extended. In doing this, caution muſt be uſed to avoid the ſituation of the placenta, and, alſo, that no time intervene betwixt the inciſion of the uterus and extraction of the child, that its contraction may at once ſtop the hæmorrhage. Having introduced the finger then, with two or three cuts the inciſion is enlarged, and the child taken up as quickly as poſſible by the feet. If the labour, as is generally the caſe, has continued long before the operation is employed, part of the head will perhaps be locked in the brim of the pelvis, and it requires ſome force to diſengage it. A finger may therefore be introduced within the vagina, with a view to puſh it up; though perhaps Dr. OSBORNE would

conſider ſuch a caſe as capable of being delivered by the crotchet.

As ſoon as the child is removed, the uterus contracts with great rapidity, and the placenta is at once forced off, which becomes extracted at the ſame opening. The operation is then finiſhed, by the removal of any clotted blood effuſed in the proceſs; and the after-treatment becomes the next, and moſt important, part of the buſineſs.

CCLXVII. From the ſtate of the parts, two circumſtances in the management here ſhould direct our practice.

1. The firſt is to promote the adheſion of the divided parts; and,

2. The ſecond to circumſcribe the incipient inflammation.

CCLXVIII. To effect the firſt, an accurate re-union of the lips of the wound ſhould be attempted. Different methods of doing this have been propoſed. Sutures are the moſt certain method, and the quilled one has been generally employed here. The effect of all ſutures however, we find, to be unavoidable pain, and increaſe of inflammation. Beſides, the ſize of the uterus diminiſhes very quickly after the operation, ſo that, in the courſe of 24 hours, it is ſituated within the pelvis, or pretty much reduced to its natural ſtate. Hence the danger of its being protruded at the opening is not ſo great, if attention is paid till this take place; and, therefore, the very principal reaſon for the uſe of the future may be in a great meaſure diſpenſed with. The tegu-

ments alſo of the abdomen, from the diſtenſion of geſtation, are ſo much extended, that their retraction will not occur to that degree as to render the application of a future neceſſary; and we have many inſtances where, after the operation, no future was applied, and yet no inconvenience aroſe from the protruſion of parts. To ſtrike a medium therefore, or to confine ſufficiently the lips of the wound, without giving that pain a future occaſions, the application of bits of ſticking-plaiſter may be propoſed, which, if confining it for 24 or 36 hours, will be ſufficient, as from the collapſed ſtate of the parts the danger of protruſion is then over. When the ſides are thus brought together, to favour their retention ſtill more, the uſual dreſſings, as employed in caſes of large wounds, are to be had recourſe to; and in this way a tendency to the re-union of the united parts, forming the firſt indication, is afforded.

CCLXIX. But the ſecond circumſtance, or the circumſcribing the incipient inflammation, is perhaps the moſt important,—as on the neglect of it, it is to be feared, the fatality of the diſeaſe certainly depends.—The ſpreading of inflammation in the preſent caſe has been conſidered as ariſing chiefly from the acceſs of the external air into the cavity of the abdomen, which, in the operation, muſt take place in a certain degree. That the inflammation may be conſiderably increaſed by this, there is no doubt; but even in thoſe caſes where every attention was paid to its excluſion, the termination of the diſeaſe has been equally fatal as where no ſuch cautions were obſerved. We cannot, therefore, attribute it ſo much to this circumſtance as ſome authors have done,—eſpecially when we know, that in peritonitis, where no air is admitted, there is often the ſame fatal termination as after the Cæſarian

operation. To account then for the fatality of the preſent operation, we obſerve, that when any point of the ſurface of a cavity becomes inflamed, it poſſeſſes, independent of the admiſſion of the air, a tendency to ſpread; and the conſequence of this laſt is its termination, either in adheſion or ſuppuration. The former is the moſt favourable termination; and with this view, an accurate reſtriction of the divided parts, as formerly recommended, which favours adheſion, ſhould be ſtudied; for if once ſuppuration takes place from the exhauſted ſtate of the patient, and the long continuance of irritation on the ſyſtem, in conſequence of this proceſs, death muſt unavoidably enſue. Yet the quantity of diſcharge which neceſſarily ariſes from ſuch a large wound, as both that in the uterus and teguments, muſt almoſt always prevent adheſion; and it is therefore more this circumſtance, perhaps, of the formation of matter within the cavity of the abdomen, or the extravaſation of fluids, preventing an early termination of the diſeaſe by adheſion, that is to be conſidered as the cauſe of death, than the mere temporary admiſſion of the air in the operation,—the one forming an accidental, the other a continued irritating cauſe; while, in the inflamed ſtate of the cavity, the abſorbents are unfit for removing any portion of the extravaſated fluid before this termination takes place. Hence the neceſſity for the removal of every extraneous matter from the abdomen before the lips of the wound are placed in contact, and of occaſionally removing the dreſſings, that a diſcharge from the abdomen, preventing the formation of pus, may ariſe; and though the admiſſion of the air is thus endangered, it will be found leſs troubleſome than matter formed in the cavity of the abdomen.—The late writers on this operation have paid very great attention to this laſt circumſtance, and that

with a boldneſs, and even ſucceſs, which ſhews that the admiſſion of the air is not juſt ſo fatal as commonly ſuppoſed.

CCLXX. Having thus conſidered the ſteps of the operation, and its effects on the ſyſtem to which its fatality is owing, we may remark that in Edinburgh it has been performed no leſs than ſix different times.—In the laſt of theſe but one the indications for the operation were wanting,—for it depended on the conſtriction of the ſoft parts, not the ſtate of the pelvis. In the early accounts of its hiſtory you will find it frequently performed with a raſhneſs, which nothing but ignorance could excuſe. But though not indicated by diſtortion, accidents happen in the progreſs of labour, at times, which render this operation, as formerly remarked, neceſſary, and that chiefly with a view to the ſafety of the child :—

Theſe are, *rupture of the uterus*, and *ſudden death of the mother.*

CCLXXI. Rupture of the uterus is an accident, inſtances of which have occurred to every practitioner of extenſive experience; and ſome have even met with a very great number of them. The occurrence indeed of this accident we ſhall not be ſurpriſed at, when we conſider the manner in which the action of the uterus takes place in labour. By its contraction, every part of its cavity is ſtraitened, or forms a reſiſtance to its contents. This reſiſtance, however, is leſs at the orifice than in any other part, and the action of the other parts is likewiſe aſſiſted by the abdominal muſcles, and diaphragm, which render the effect of their contraction more powerful on the orifice.—If then the orifice is uncommonly rigid, or præternaturally contracted, ſo as to

poſſeſs an equal reſiſtance with the action of the other parts, the labour either cannot proceed, or ſome part of the uterus that is weaker than the orifice, from the action of the other parts bearing againſt it, will give way, and a rupture of it then be produced. The place of the uterus, at which that moſt commonly happens, is the neck,—for the fundus is protected from the ſuperior reſiſtance it acquires, by the addition of the abdominal muſcles, and other aſſiſtant parts, co-operating with it.

CCLXXII. The cauſes of this accident are all unknown to us, and we ſhall only repeat them as enumerated by authors.

1. The firſt ſet of cauſes is, thoſe which produce difficult labour,—as diſtortion of the pelvis, and morbid contraction of the external parts.

But theſe we know occur in a thouſand caſes, without rupture of the uterus.

2. Violent and irregular contractions of the organ itſelf, as in caſe of convulſions; and if this ſymptom occur along with diſtortion, ſo as to prevent the termination of delivery, it certainly may have very powerful effect.

3. The exceſſive bulk of the child's head locked in the pelvis; and,

4. Accidental injury of the uterus itſelf, from ſtrokes, &c.

Theſe cauſes then occurring where the uterus is previouſly in a diſeaſed ſtate, may occaſion this accident to happen; but we can have very little ſuſpicion of it till it take place; and even admitting we have ſuſpicion of it, we are not authoriſed, on ſuch ſlight grounds, to at-

tempt immediate delivery, without other circumſtances in the caſe indicate the propriety of it. Hence it is of more conſequence to be able to aſcertain the ſigns of this accident, when it has really happened, than to know its cauſes.

CCLXXIII. The ſigns commonly enumerated, are

1. The ſudden diſappearance of the head, or preſenting part, formerly eaſily felt.

2. Exceſſive pain of the abdomen, fixed particularly in one place:

3. Remiſſion of the throes of labour, formerly violent.

4. Reaching and flooding; and,

5. Weak intermitting pulſe, with tendency to deliquium.

It is however the ſudden diſappearance of the preſenting part, if once certainly felt, and the ſtate of the pulſe, we are more to truſt to than any other,—for the others may all occur in the courſe of a natural labour, independent of this accident.

CCLXXIV. In the late Dr. YOUNG's Lectures there are three caſes mentioned of this accident, and in all of them the labour pains were uncommonly trifling, ſo that it could not be referred to any violent action of the organ, but was evidently the effect of diſeaſe.

CCLXXV. Where this accident occurs for the delivery of the child, the Cæſarian operation has been propoſed; but ſome objections may be urged againſt it, from the ſtate of the patient, and more eſpecially as the child does not deſcend completely, for the moſt part, into

the abdomen; ſo that ſome of its members being entangled in the laceration, will allow the introduction of your hand to get at the feet, when the delivery may be more properly completed in this way. Beſides, wounds of the uterus are mentioned by authors as not always fatal, and a greater chance therefore is given to the patient if the extraction is made in this way, than by a new inciſion through the abdomen. The delivery, however, muſt be very quickly made, as by keeping the wound extended the patient will ſink in a few minutes from the internal hæmorrhage, and ſhe commonly indeed dies under your hands. Hence it has been propoſed by ſome authors, to delay any attempts at delivery till the death of the mother takes place, and that the Cæſarian operation ſhould then be performed as quickly as poſſible. But however humane this practice may be, it is not giving her any chance of recovery; and when the ſmalleſt hopes remain, however unfavourable circumſtances may appear, it is certainly the duty of the practitioner to take advantage of them, and to leave nothing undone which may contribute to ſave the patient.

Where the rupture again occurs in the more advanced progreſs of labour, or where the head is fixed in the pelvis as ſoon as this accident takes place, the forceps are to be employed to make the extraction as quickly as poſſible; and the hand being then introduced to bring off the placenta, you will be able to aſcertain the extent of the rupture. But the great loſs is, that it is only by the death of the patient the accident is for the moſt part aſcertained; for the diagnoſtics are ſo uncertain, as either not to ſtrike practitioners at the time; or the patients being attended by women, they are not ſenſible of the danger when the accident occurs.

CCLXXVI. To this ſubject, Mr. CROAIZ has paid particular attention, and has endeavoured to mark thoſe previous ſymptoms in the courſe of the labour that point out this accident as going to happen. He remarks, that in ſuch women, the abdomen, upon examination, feels very prominent, and much diſtended, the vagina drawn upwards, and the orifice of the uterus uncommonly high. The pains at the ſame time are extremely violent, without any intermiſſion, and the labour is very inconſiderably advanced by them. But all theſe ſymptoms may occur in the courſe of labour, without any ſuch accident taking place; and therefore the enumeration of ſuch ſymptoms ſerves only to frighten a practitioner in his attendance, and more eſpecially if his patient has been in a delicate ailing ſtate.

CCLXXVII. In theſe rare caſes, termed *extra-uterine*, where the fœtus is originally placed without the uterus, the Cæſarian operation is more properly indicated than in a rupture of the organ. But this ſubject is afterwards detailed; and as the ſymptoms of it are obſerved to be ſomewhat equivocal, it ſhould never be performed but where nature ſeems to point it out, by inflammation of part of the abdomen, tending to abſceſs, when the enlargement of the diſeaſed part will give an opening to the body contained, to leave the cavity of the abdomen.

CCLXXVIII. The laſt ſituation in which the propriety of the Cæſarian operation is pointed out, by ſudden death of the mother, is a frequent occurrence; but it oftener takes place after delivery, than during the former period. It ariſes from the mother being worn out with previous diſeaſe, or from the former accident of the

rupture of the uterus occurring, and not being ſuſpected, Wherever it happens, the Cæſarian operation, inſtantly performed, offers certainly the only means of ſaving the child. As yet it is not aſcertained how long a child may ſurvive the death of the mother; and till this is done, we cannot be to early in attempting the extraction. It is needleſs to perform it here with all the cautions which are neceſſary to be obſerved in the living ſubject. Some authors have alleged, that deliquia may at times impoſe on us, and that ſome ſpace of time ſhould intervene after the death of the mother, before having recourſe to this operation. But deliquia very rarely occur in the courſe of labour, except in caſes of flooding; and therefore there is a ſtrong preſumption of our not being deceived. Beſides, the eye, in the caſe of death, very ſoon acquires always a dull collapſed appearance, and even the previous diſeaſe to which the patient has been ſubject will render it leſs doubtful. Though the ſooner then we have recourſe to the operation, the better; yet, even at the diſtance of many hours, we ſhould not deſpair of ſaving the child,—for it has been ſucceſsful, even at the diſtance of twelve. A prejudice in this particular caſe luckily prevails in its favour; and this is even extended to the greater part of geſtation, eſpecially after the ſixth month, when it is thought always proper that the child ſhould be removed.

CCLXXIX. On the whole, this operation is ever in the living ſubject a deſperate reſource; and, by Dr. OSBORNE's calculation, the proportion ſaved by it is only one out of ten, though performed by the firſt ſurgeons, and conducted in the moſt guarded manner. Every attempt therefore merits well of ſociety, that aims in the ſmalleſt degree at ſuperceding the neceſſity for employing it.

CLASS IV. *Manual Labours.*

I. Thoſe labours we term manual, where, from ſome other part than the head preſenting at the uterine orifice, aid, or manual aſſiſtance, is found for the moſt part neceſſary to effect the delivery.

II. That the head inclines naturally to be the preſenting part in all caſes we endeavoured to prove, from its ſhape, its ſpecific gravity, and its acting moſt equally in dilating the uterus by an uniform and gradual preſſure, which, where too conſiderable, admits, by the mode of its formation, ſome diminution, in conſequence of a powerful reſiſtance of the containing parts. At times, however, from ſome irregularity in the contraction of the uterus, or the conſequent rupture of the membranes, before the head is engaged in the paſſage, particularly in diſtorted caſes, where it does not eaſily enter, ſome other part of the child deſcends inſtead of it; and the varieties of ſuch preſentations, termed *præternatural*, may be reduced to four; the *footling*, *natal*, *tranſverſe*, and *brachial*.

III. To extend the diviſions of this ſpecies of labour farther, as many have done, is of no importance, from comprehending no variety in the management; and, though every point of the body may occaſionally preſent at the uterine orifice, yet this information can ſerve no uſeful purpoſe, except where it directs to a difference of treatment; and, as many of the poſitions enumerated by authors are very rarely met with, it is burdening the memory to recollect the particular rules applicable to

them, while the four diviſions mentioned are ſufficient to convey a general knowledge of the methods that may be employed in every poſſible variety occurring.

IV. Manual labours, like the inſtrumental, may be properly divided into two ſtages,—the preparation for delivery, and the operation itſelf.

V. The former conſiſts in,

1. Determining exactly the poſition of the child.

2. Rendering the ſtate of the uterus favourable to the delivery; and,

3. Directing the poſition of the patient as moſt convenient for the operation.

VI. With reſpect to the firſt, all the ſigns of præternatural preſentations before the rupture of the membranes are uncertain; nor can it be determined till we are able to know, by the feel, the preſenting part. In all ſuch poſitions too, beſides the preſenting part, we ſhould endeavour to aſcertain the form in which the child is placed in the uterus, by the external feel; for where placed in a longiſh form, the uterus contracts to the ſame, and forms a greater reſiſtance than where it is placed in a more rounded figure, and where, of courſe, the hand can be more eaſily inſinuated.

VII. In regard to the ſecond, or ſtate of the uterus, in moſt caſes of manual delivery its relaxation ſhould be procured as much as poſſible, and a ſuſpenſion of action for a time attempted. The moſt favourable time, when the relaxation of the uterus is greateſt, is immediately on the rupture of the membranes, before its contraction can take place round the body of the child; but where

we have not an opportunity of taking advantage of this time, an artificial relaxation of the organ muſt be induced before attempting the delivery. For this purpoſe a large opiate muſt be adminiſtered, and the delivery promoted, when the atonic ſtate, or ſuſpended action of the uterus, commences. This practice was firſt recommended by the late Dr. HUNTER. The doſe muſt be very large, and even 120 drops are but moderate.

VIII. On the laſt circumſtance, or poſition of the patient here, we may obſerve, that it muſt be varied in the two ſtages. In the former, where the introduction of the hand into the uterus becomes neceſſary, the ſide ſhould be employed, or, which is preferable, the patient ſhould be placed on her knees and elbows, by which the contents of the uterus will act leſs againſt the os tincæ, and thus give leſs interruption to the introduction of the hand. In the operation, however, of delivery, in all præternatural poſitions, the back ſhould be preferred,—as the head, being the laſt part expelled, and the ſtate of the labour not admitting time for it to take its natural turns, by this poſition the extraction is more in the power of the operator.—

IX. Theſe then are the ſeveral circumſtances to be obſerved in the firſt ſtage of this ſpecies of labour; and thoſe of the ſecond conſiſt—

1. In the proper method of introducing the hand; or what is termed *turning*, with the view of rendering the poſition of the child favourable to expulſion; and,

2. When turned, in effecting the delivery by the lower extremities.

X. The rules for turning are very eaſy. The great

point is to know accurately the ſituation of the lower extremities before attempting it; and for this purpoſe the hand ſhould be applied firſt externally, on the abdomen, to aſcertain the poſition of the body, the parts of which will readily be felt through the teguments; and, when aſcertained, you are then directed what hand to apply to get at the feet; for, if lying on the oppoſite ſide of the uterus, your hand, when introduced, muſt be again withdrawn, which is troubleſome, and turned to the oppoſite ſide.

Footling Caſe.

XI. The delivery of the lower extremities, or what is termed a *footling caſe*, may be conſidered in this ſpecies of labour in the ſame light as natural labour in head preſentations. Its management, therefore, ſhould be well underſtood, and the chief difficulty in it conſiſts in the extraction of the head. When the membranes are broken, at which time only one can aſcertain this ſpecies of labour, if footling, it may be diſtinguiſhed by the heel, and want of the thumb; and we ſhould be accurate in obſerving theſe circumſtances, as the hand is ſo ſimilar in its general feel.

XII. This diviſion of manual labour may be conſidered almoſt as natural; for, if the parts are well formed, patients in this ſituation are frequently delivered without any particular aſſiſtance. Among the ancients, the reducing the preſenting part to the natural poſition, or the head, was the moſt general method. Failing of the head, they delivered by the feet, but reckoned it always a hazardous ſituation; and where they did deli-

ver in this way, they were exceedingly ſcrupulous that both ſhould be brought into the paſſage before attempting extraction. In theſe caſes, however, it is often difficult to bring down the ſecond foot; and in attempting it, the patient ſuffers a good deal of pain, while the delivery can be completed with equal eaſe with one foot.

XIII. The management of this preſentation is to be conducted as follows. The feet are to be allowed to advance as far as poſſible by the natural aſſiſtance of the pains; but when the head, deſcending into the pelvis, forms a reſiſtance, a warm cloth is to be wrapt round the limbs of the child; while, at the recurrence of each pain, ſome force is employed in pulling gently from ſide to ſide; and when, by this means, ſhifting always the hold as the body comes to be protruded, the breech appears without the labia, as it is neceſſary for the extraction of the head, the back of the fœtus ſhould be to the pubes of the mother, a turn greater or leſs, according to the ſtate of preſentation, muſt be given, in order to reduce it to this ſituation.

When the breech is delivered, the body being ſmaller, eaſily deſcends for the length of the ſhoulders; but a reſiſtance ariſes from them, to leſſen which it is proper to bring down the arms; and, as they are generally placed in a direction along the ſides of the head, to perform this the body of the child muſt be ſupported on the arm of the operator, and carried as much as poſſible to one ſide of the labia. The other hand is then to be directed to the oppoſite ſide, where the greateſt room for its introduction is by this means allowed, and the fore finger being placed over the ſhoulder, while the middle one and thumb are below it, the arm is to be

brought out by making a turn with it along the child's breaſt, and inclining its elbow to the coccyx of the mother. If, however, the fore finger cannot be paſt, when introduced over the ſhoulder, farther efforts muſt be uſed for bringing the body lower, before an attempt is made to reduce it.

After the reduction of one arm, the body of the child is next to be carried to the other ſide of the labia, and ſupported in a ſimilar manner as on the former, on the other arm of the operator, while the hand that ſupported it on the firſt ſide is to be introduced to bring down the ſecond arm of the child, which is now rendered more eaſy by the reduction of the firſt.

When both arms are thus brought down, and in doing it, that one (if a turn has been already made with the body to reduce the head to a proper direction with the ſacrum) on the ſide from which the turn was made is to be preferred, the extraction of the head muſt be ſpeedily attempted from the danger the cord ſuffers in conſequence of compreſſion at this part of the delivery; and this extraction is to be made by placing two fingers of one hand on each ſide of the child's neck, while the other ſupports its breaſt; a finger of which, if neceſſary, may be alſo introduced within its mouth: and the poſture of the operator is then to be changed, for, riſing up, he endeavours to diſengage it, by pulling in a direction the reverſe of the former, from ſacrum to pubes.

XIV. Though this method in general ſucceeds, yet the ſame difficulties which hinder the advancing of the head in inſtrumental caſes may detain it after the body in a footling preſentation; and theſe difficulties in the

latter are even increaſed by want of time to accommodate itſelf to the paſſage. According, therefore, to the variety of cauſes which prevents its extraction, different means muſt be uſed for its delivery; and as it ſometimes proceeds from contraction in the orifice of the uterus, the latter may, by the introduction of the hand, be dilated; or when, from the head not following the turn which is made on the protruſion of the breech, to place it in its natural ſituation, it muſt be altered by puſhing it up, and bringing it down in a different direction. If this ſhould fail, the forceps may be in ſuch circumſtances employed, and the former rules for their application will be equally proper here. But in ſome of theſe caſes, where difficulties occur to the extraction of the head, it has been even ſeparated from the body,—an accident that frequently happened to the early practitioners, who were not ſo attentive in obſerving the direction of its paſſing through the pelvis. On this account you find in moſt of the publications on midwifery a ſeparate diſſertation on this ſubject. In modern practice it never occurs, and would be conſidered as marking great miſconduct in the operator. Should it unluckily happen, however, from the body being in a putrid ſtate, the rules to be obſerved in extracting it may be made more ſimple than what are detailed in the authors who treat of it. If the dimenſions betwixt it and the pelvis agree, when placed in the natural poſition, which you can do with your hands, the pains, if continuing, will expel it. But if no pains come on, it is then to be extracted with the forceps, a preſſure being made on the abdomen in order to ſecure it during their introduction. Should, however, a great diſproportion prevail between its ſize and that of the pelvis, the long ſciſſars and crotchet muſt then be employed, after keeping it firm for their application by the former means.

This then comprehends the firſt ſpecies of manual labour. It deſerves particular attention, as the reſt are all reduced to it in the courſe of delivery.—The next we come to is the *natal* or *breech* preſentation, which, after the head, is moſt frequently met with.

XV. This preſentation is not to be aſcertained till after the rupture of the membranes; for the preſenting part, while incloſed, gives much the ſame feel with the head; nor is the knowledge of it of any conſequence, unleſs the pelvis be diſtorted; for, if ſo, by not allowing it to paſs, it muſt then be reduced to the former, or the footling preſentation, and the ſaving ſome portion of the waters will render this more eaſily accompliſhed.

The expulſion of the meconium with the waters has generally been mentioned by authors as a leading ſign of this preſentation. It depends, however, on the deſcent of the body ſo far, before the rupture, that the abdomen is compreſſed by the pelvis; and hence a natal preſentation may occur without this ſymptom.

When the membranes are ruptured, it is diſtinguiſhed by the cleft betwixt the buttocks, and the parts of generation.

XVI. Two methods of delivery have been recommended in this caſe, and each claims the ſanction of very reſpectable practitioners.

The one is, to reduce it as ſoon as aſcertained, by puſhing up the preſenting part, introducing the hand into the uterus, and bringing down the feet to a footling preſentation.

The other is, to allow it to proceed in the preſenting poſition.

The only argument in favour of the former of them is, that you always occaſion a painful and tedious labour, as the preſenting part greatly exceeds in bulk the ſize of the cranium. This, however, is obviated by the ſtructure of the preſenting part, which admits more readily of compreſſion than the cranium; and of births preſenting in this way, we find alſo at leaſt eight out of twelve delivered without any uncommon difficulty; and the only ſituations where it may fail, or meet with difficulty, is in the caſe of a firſt labour; while, in both footling and breech caſes, if occurring in a firſt labour, it may be obſerved the children are generally loſt, though in the ſame ſituation in a ſubſequent delivery no difficulty will occur. In all breech caſes therefore, unleſs in a firſt labour, or where the pelvis is diſtorted, if allowed to advance the ſpace required for the paſſage of the buttocks, will eaſily admit the expulſion of the head.

XVII. For theſe reaſons detailed a general rule ſhould be laid down in all natal caſes, to allow the preſenting part to proceed. As ſoon as aſſiſtance can be given, a finger is then to be inſinuated under each groin, and gently brought forward in time of a pain, till the thighs come to be diſengaged, when it is reduced to the former, or a footling preſentation, and the rules pointed out for delivery in it will be equally applicable here.

Inſtead of the finger, where the groin is too high for its application, or the pelvis too narrow to admit it, many authors have adviſed the uſe of the blunt hook; but,

as you cannot be certain of the exact force the thigh will safely bear, and, if injuring it, you cannot know it *quickly* when you employ the inſtrument, the finger is on theſe accounts to be preferred.

XVIII. This then comprehends ſhortly the management of the two firſt ſpecies of manual labour, and a mixture of them often takes place by the preſentation of one foot at the uterine orifice, while the other is laid along the belly of the child.

If the ſecond foot cannot be reached eaſily, or is difficult to be brought down, the extraction is to be made with one, in the ſame manner as if both preſented; for the birth of the ſecond being effected by the protruſion of the breech, it is reduced to the firſt, or a common footling delivery; and in the variety of the two firſt ſpecies of manual labour nothing farther is required but to aſſiſt the effect of the pains in the manner recommended, allowing generally the preſenting part to be expelled, and avoiding, before the arms are reduced, hurrying the delivery.

XIX. The third ſpecies of manual labour, or the *tranſverſe*, comprehends any part of the body of the child, as the back, belly, or ſide, preſenting at the uterine orifice; and the delivery here requires one preliminary ſtep, not neceſſary in the former poſitions, of altering the ſituation of the child previous to the delivery.

XX. The membranes here are commonly ruptured very early; and, before their rupture, no part of the child can be felt; after, the cord is often found prolapſed, while the os uteri becomes leſs dilated than before, and the pains depart for ſome hours, frequently

ſome days, returning afterwards with increaſed ſtrength. The woman alſo, in ſuch caſes, it has been remarked, complains much of her ſide, as being affected with unuſual pain.

XXI. The moſt common variety of this ſpecies of preſentation is the belly; and, as the hand can be eaſily introduced, and the feet taken hold of, there is little difficulty in this preſentation, as it is ſoon reduced to one of the former ſpecies.

XXII. The laſt ſpecies of manual labour, or the *brachial*, is juſtly conſidered as the moſt difficult to be met with. In this caſe the arm preſents at the uterine orifice, and is puſhed into the vagina for the length of the ſhoulder. It is eaſily known from the feet by the feel of the hand, particularly the length of the thumb and fingers, and, as the child cannot be expelled in this ſituation, it is neceſſary that the hand be introduced into the uterus to occaſion the retraction of the preſenting part, by bringing down the feet as moſt favourable for delivery. The difficulties, therefore, that occur to this operation, form a very important object of attention.

Theſe difficulties depend on,—

1. The ſtate of contraction in the uterus;
2. The ſituation of the feet, or their diſtance from the uterine orifice; and,
3. The preſence of pains oppoſing the introduction of your hand.

XXIII. With reſpect to the firſt, we find the uterus, ſoon after the evacuation of the waters, acquire a rigid contracted ſtate, unfavourable to extenſion; and, according

to the ſituation of the body of the child, it aſſumes either a globular or longitudinal form, and it is much eaſier to turn in the former caſe than in the latter, though the contraction of the organ is equal.

XXIV. With reſpect to the ſecond, or ſituation of the feet, they are generally, in this caſe, placed at the very fundus uteri; and there are very few arm preſentations where it does not require us to go to the very bottom of the uterus before we can reach them.

XXV. With reſpect to the third, or the preſence of pains, it is remarked in this preſentation that the pains are at firſt generally very violent; and they are at the ſame time, from the irritable ſtate of the uterine orifice, excited on the leaſt attempt to introduce the hand, ſo that, to the natural contracted ſtate which takes place after the evacuation of the waters, there is added a ſpaſmodic contraction from its irritability.

XXVI. Before, then, attempting to turn, theſe difficulties we muſt endeavour to remove as far as poſſible.

As the contraction of the uterus is the principal one, it ſhould be performed as ſoon as the waters flow off, which are a conſiderable advantage, particularly if any portion is retained in the ſuperior part, as they keep the uterus in a ſlippery extenſile ſtate.

Before turning, alſo, the ſituation of the feet muſt be accurately aſcertained, and this we do by conſidering the hand that preſents, whether it be the right or the left, which is known by the direction of the thumb and palm, and alſo by the external feel of the uterus itſelf.

If ſpaſm occur on attempting examination, the next ſtep is the overcoming the irritability of the uterus, which we do by the exhibition of a large opiate; and we begin our attempts when it ſeems to take effect, and the patient is diſpoſed to ſleep.

XXVII. After having removed theſe difficulties, the patient being properly placed, as formerly recommended, we begin the operation by paſsing the hand quickly through the vagina in a conical form; for in paſſing here it gives pain, till it reach the os uteri. It is to be paſt into the latter betwixt the preſenting part and pubes, as it is moſt eaſy to come at the feet in this way. It is to be then carried, when introduced, as high as poſſible, till a foot is reached, and an attempt is then to be made to bring down the latter into the vagina. When brought down, it is to be held by the hand introduced, till a piece of tape or ribband is paſt over the ancle, directed by the fingers of the other hand, which, when tightened, forms a nooſe, and is to be kept firm without the labia by being rolled about the palm of the ſame hand that directed its application, and the hand introduced is then to be paſt to the preſenting part, puſhing it up to the fundus, by which the child is brought round, and the preſentation reduced to a footling caſe. If, when the hand is introduced into the uterus, the action of the organ is excited, we ſhould proceed no farther till it ceaſe; nor attempt to counteract its efforts, for there is then danger of the rupture of the uterus. If both feet can be laid hold of eaſily, we ſhould endeavour to bring them down; but if we are in poſſeſſion of one, we are always able to finiſh the delivery; and, unleſs the other is at hand, it is uſeleſs to give ourſelves much trouble to ſearch for it. When the feet are brought into

the paſſage, we then attempt the extraction, with one hand pulling by the nooſe, while the other takes hold of the feet. If the preſenting part does not then retract, or the body turn round, it is owing to its being jammed in the ſuperior part of the pelvis; and by paſſing the hand to the ſhoulders, and raiſing them up to the fundus uteri, the reſiſtance to the extraction of the feet will be removed.

Before bringing down the foot we lay hold of into the vagina, we ſhould be certain it is a foot; and it is neceſſary, therefore, to proceed ſlowly,—for if it prove the hand, the difficulty of introducing the hand of the operator into the uterus will be afterwards increaſed.

XXVIII. We are informed by many practitioners, that they have been often three hours before reaching a foot in arm preſentations, after the introduction of their hand into the uterus. Though it is often a troubleſome operation, if the preliminary circumſtances recommended have been attended to, this will almoſt never happen, and the half of the time, if not leſs, will be ſufficient. Such practitioners would ſeem fond of magnifying difficulties; and they may be aſked, if they were ſo long, what they could mean by ſuch conduct; for it could only proceed from two circumſtances, either the poſition of their patient not allowing them to get the hand high enough, or they muſt have been conſtantly endeavouring to oppoſe the action of the uterus, forming the chief obſtacle to their getting ſufficiently high, and the organ being at laſt worn out by their efforts, they came to ſucceed. But would it not have been much better to induce this atonic ſtate at once by more gentle than ne-

chanical means. Such difficulties, therefore, were much the effect of their own mode of procedure.

XXIX. But if this ſpecies of manual labour has continued to proceed for long after the evacuation of the waters, before an attempt is made to deliver, the preſenting part comes down to that extent into the vagina, and at the ſame time becomes ſo impacted in the paſſage, that the introduction of the hand paſt it, in order to be admitted into the uterus, is not poſſible. In this caſe, then, an attempt is to be made by fixing the forefinger and thumb in the axilla of the child, in the form of a crutch, to puſh the ſhoulder towards the head, and the latter again towards the fundus uteri, ſo as, by degrees, to raiſe the body of the child till we have ſufficient room.

XXX. In ſome caſes, however, it is impoſſible to do this, or our efforts may be ſo violent as to prove fatal to the patient. It was formerly the cuſtom in theſe ſituations, as they judged immediate delivery here always neceſſary, to remove altogether the preſenting part, by wreſting the arm from the ſocket, or fixing the crotchet in the ſhoulder, ſo as to accompliſh the ſame end. This, however, is never allowable, and is to be rejected entirely from modern practice. Nay, when one arm was removed, they did the ſame to the other, then fixt the crotchet ſomewhere in the thorax, ſo as to bring down at laſt the lower extremities of the child; and, in this way, after much toil and ſeparating great part of it, they ſucceeded in effecting delivery.

XXXI. But in ſuch caſes a new and more agreeable mode of practice is now recommended by the authority of Dr. DENMAN, and his obſervations form an import-

ant improvement in conducting labours of this kind. In arm presentations he observes, where the presenting part is impacted, and the action of the uterus very violent, so as to endanger the life of the mother if we attempt to turn, that the presenting part is pushed down till it can proceed no farther. It is then fixt, and, the action of the uterus continuing, the lower extremities which are moveable are pushed down by it towards the pelvis. As this takes place, the presenting part comes again to rise or be retracted, and, at last, the breech comes to fill up the uterine orifice,—the child turning, as he terms it, on its own axis, and coming at last to be completely delivered by a *spontaneous evolution*. In all cases, however, of this kind, from the violent action of the uterus to effect it, the children are expelled dead. Hence, it is only where we cannot pretend to save the child, where the introduction of the hand cannot be effected, or where, if introduced, the attempts of turning might prove fatal to the mother, this practice is to be trusted to; and, as the women themselves reckon turning in such situations of labour always necessary, this mode of conduct in the practitioner will seldom be admitted. Dr. DENMAN, however has much merit in making the observation, as he gives us a resource which is both agreeable to humanity and the safety of the patient. Dr. DENMAN's observations have been also confirmed by the cases of some late writers.

XXXII. Such is the general treatment of manual labour (detailed from I. to XXX.). It is needless to extend the rules, as many authors have done, to too great length. The whole management consists in changing the position of the child when unfavourable, or turning, and afterwards in delivering by the feet.

In footling delivery the chief difficulty lies in the ex

traction of the head, and the rules to be obſerved in effecting it are ſimply theſe:

1. If it does not readily yield, the force applied muſt be gradually increaſed till it is ſufficient to overcome the difficulty.

2. In employing force, it muſt be uniform, commanded, and exerted at intervals.

3. If it does not deſcend with all the force we can ſafely apply, we muſt intermit, and give the head time to collapſe.

4. When reſumed, it muſt be exerted in every direction, backward and forward, and from ſide to ſide alternately.

5. When the head once begins to deſcend, the difficulty is overcome, and time may be taken to the reſt of the extraction.

6. Though the head ſhould remain hours in this ſituation, we ſhould not have recourſe to the uſe of inſtruments early.

CLASS V. *Anomalous Labours.*

I. By the laſt ſpecies of labour, or the *anomalous*, we underſtand all thoſe, which, from being complicated with certain morbid circumſtances, do not enter properly into the former diviſions.

1. *Flooding.*

II. The firſt and moſt important in the arrangement of theſe is what has been termed *flooding-caſes*: for every appearance of uterine hæmorrhage, after the fifth month of geſtation, it is agreed by all practitioners, is to be conſidered as highly dangerous, the enlarged ſize of the veſ-

ſels threatening then, if continuing, the life of the patient. Nay, there are even ſome inſtances of death ariſing from this cauſe more early; but, as theſe caſes are very rare, they lead properly to no general concluſion.

III. The appearance of theſe floodings is very various. In ſome they are preceded by or are attended with uterine pains; in others there is not the ſmalleſt threatening of their attack. Where the diſcharge is moderate, they have been known to continue three weeks, or even longer, without reducing very much the ſtrength of the patient, or rendering delivery neceſſary. But in general their effects are more ſudden, and the ſymptoms they produce very quickly alarming. Sometimes they are temporary, flowing for a ſhort time, and then diſappearing; when, after an interval, they return with increaſed violence. In theſe caſes every attack, though apparently ſlight, is to be judged highly dangerous; and we are not to form an opinion where it frequently recurs from its apparent effects; for the patient, though ſeemingly not ſo much exhauſted, generally ſinks unexpectedly, eſpecially on attempting delivery, and that without any alarming increaſe of flooding during the operation. Hence, in theſe ſituations, it ſhould be begun early.

IV. The cauſe of uterine floodings in the pregnant ſtate depends *always* on the *ſeparation* of the placenta; and its ſituation in the uterus is the *only* direction we have, with reſpect to its remote cauſe, and the prognoſis to be formed.

V. The natural ſituation of the placenta we find to be at the fundus uteri. The ſtretching of this part firſt

commences; and, by the time that a proper adhesion between it and the placenta has been formed, the extension of that surface to which it is applied has fully taken place. Hence the separation of this connection can only arise from certain causes increasing the action of the fundus, so as to influence the circulation between it and the placenta, producing, of course, a rupture of some vessels.

But late observation has shown, that the situation of the placenta is *not always* towards the fundus. It is often placed farther down at the neck, and even at the orifice itself. As the adhesion then between the placenta and contiguous surface is found in these cases unfavourable, where the parts have not received their extended state, this connection must come to be affected as they begin to stretch; and a *partial separation* occurring, flooding will ensue.

VI. From these observations, then, two different species of hæmorrhage in advanced gestation are to be remarked, which, by symptoms, we may ascertain.

In the former species it is generally preceded by *some active* cause, such as occasions abortion in the early state; and to this the patient herself commonly traces it.

In the latter, however, it occurs without *any previous* cause, as arising merely from the natural stretching of the uterus.

The former is generally attended with slight pain from the first appearance of flooding, which increases in its progress.

In the latter, pain never occurs originally, but only arifes in the advanced ftage, or is brought on by the attempts of the operator himfelf in delivery. The flooding is alfo lefs violent in the time of pain in the former, while, in the latter, it is increafed by it.

VII. The firft to whom we are indebted for any juft obfervations on gravid hæmorrhages is Mr. Puzos, who remarks, that we fhould in general form a bad prognofis; for of thofe feized with floodings at this period, more than one half die. This, however, is to be attributed to circumftances of treatment as well as fituation. But though Mr. Puzos obferves, in a general way, that fuch floodings arife from the feparation of the placenta, he has not remarked its difference of fituation in particular cafes, by which our prognofis is directed. This laft circumftance has been principally enforced, and its application pointed out, by Mr. Rigby, who remarks, that authors are divided with regard to the practice in fuch fituations; for fome, we find, advife in every inftance immediate delivery, while others are for waiting till nature is nearly exhaufted, and then for having recourfe to the affiftance of art. As in many cafes, then, this method of trufting to nature is effectual, Mr. Rigby wifhes to fix fome criterion, by which we may judge in what particular fituations this is proper; and in what others, again, art is to be immediately employed. This, he thinks, is to be determined by our knowledge of the fituation of the placenta; for where it is improperly attached towards the neck, or inferior parts of the uterus, as the action of the organ muft always increafe the flooding by increafing the feparation, nature fhould never be confided in for the fuccefs of delivery,—but recourfe immediately had, by art, to the

removal of the uterine contents. To detect then this ſituation of the placenta, the hand is adviſed, in every caſe of flooding, to be introduced within the vagina; and when introduced, a finger muſt be paſt within the uterine orifice, which, if carried up ſome little way, will aſcertain whether the placenta be towards that ſituation. The paſſing the hand in theſe caſes gives little pain, from the relaxed ſtate of the parts.

VIII. When the ſituation of the placenta is thus detected, or finding from no marks of it within reach, ſuppoſing it occupies its proper place towards the fundus, the termination of the accident, in this caſe, is to be truſted to nature; which is done by enjoining ſtrictly a horizontal poſture; by cold applications to the uterine region; by refrigerants internally, in liberal doſes, where the ſtomach can bear them; and mild nouriſhment in ſmall quantity. If ſtrong, and the flooding commences with conſiderable fever or pyrexia, ariſing evidently from an external cauſe, early veneſection is likewiſe admiſſible.

IX. By this treatment, the hæmorrhage will often ſubſide; and where yielding, the greateſt attention is to be paid, that the patient do not ſoon return to motion, as a relapſe is always endangered, and each ſucceeding return is to be eſteemed more alarming.

X. When an improper attachment of the placenta is diſcovered, both from the ſymptoms mentioned (LI.) and alſo from examination itſelf, the evacuation of the uterine contents is the *only* means then to be depended on; the circumſtances to be attended to, as neceſſary to its ſucceſs, are—

1. The proper time when ſuch an operation is to be begun.

2. The prognoſis to be formed by the operator, before attempting it from examination; and,

3. The mode of delivery itſelf.

XI. With reſpect to the firſt of theſe, the attempting it early, or while no urgent circumſtances enforce its neceſſity, is by moſt practitioners reckoned unadviſable. At the ſame time, it may be delayed too long. A judgment cannot be formed from the quantity diſcharged; for the appearance in this way, eſpecially if on clothes, is very fallacious, and the real quantity may be very inconſiderable. We judge entirely from its effects on the patient; and unleſs ſeized with fainting, quick feeble pulſe, indiſtinct viſion, &c. few practitioners reckon themſelves warranted to attempt it more early. It is a nice point, however, to hit the proper time, when it may be ſucceſsfuly performed; and this knowledge is only to be gained by frequent attendance on ſuch ſituations; for many women will be much reduced, in whom, from peculiar conſtitution, there will be little tendency to faint; and others, who are naturally delicate and nervous, in whom the balance between the ſolids and fluids is very nicely poiſed, will faint very early, before any conſiderable quantity is loſt. The pulſe therefore muſt chiefly direct us; and it is better, where circumſtances favour, to begin delivery too early, than defer it too long; and perhaps there are more patients loſt from this laſt circumſtance than the former.

XII. In forming a juſt prognoſis of the event before delivery, we are directed by examination; and to this a good deal of attention ſhould be paid. If the uterus

feel very ſoft and relaxed, though it ſhows the eaſe with which delivery may be effected, yet there is danger of its not poſſeſſing ſufficient tone to contract itſelf, ſo as to ſtop the hæmorrhage after delivery. Hence, in a diſſertation by Dr. DOUGLAS, of London, it is remarked that he never ſaved a caſe, where the os uteri, on examination, had too ſoft a feel, and did not give ſome reſiſtance to his attempts of dilatation. There is, however, a conſiderable difference between that reſiſtance, which is the mere effort of tone in parts, and that morbid rigidity which may be more properly arranged under diſeaſe. In this laſt caſe, or where the os uteri appears hard and contracted, preventing, without the greateſt difficulty, any entrance to the hand, the prognoſis formed may be even more unfavourable, from the increaſed difficulty of accompliſhing delivery, than where it diſcovers the directly oppoſite ſtate.

XIII. In regard to the mode of delivery, the laſt circumſtance to be obſerved, there are *two methods* practiſed, which have both their advantages in particular ſituations. The one may be properly named *natural*, the other *artificial*.

XIV. To point out the propriety of the firſt, it has been obſerved by moſt experienced practitioners, that where pains, however ſlight, occur in caſes of flooding, delivery is generally eaſily effected, and the patient ſurvives the diſcharge, however conſiderable. On this obſervation Mr. PUZOS has endeavoured to inculcate the propriety of imitating nature, and, as all hæmorrhages of advanced geſtation are to be conſidered, when the ſeparation between the ſurfaces has taken place, as paſſive, to reduce them, if poſſible, to an active ſtate, by

exciting uterine action. This is to be done in different ways: —

1. With a view to induce the commencement of labour; and,

2. When commenced, to accelerate its progress.

XV. The former is effected either—

1. By a sudden application of cold to the fundus, immediately inducing its contraction; and unless suddenly applied, it will have no influence.

2. By irritation of the os uteri, bringing into consent the rest of the organ. This irritation is performed by the introduction of a finger within the os uteri, and rolling it round for a certain time, repeating it at intervals, by the continuance of which slight pains come soon to be produced. But, in order to be successful, some circumstances are to be attended to.

XVI. The circumstances to be attended to, for the success of this operation, are:—

1. That the os uteri be not so far weakened, as to be incapable of receiving a stimulus, which is the case where the flooding has gone on to any extent; and,

2. As little or no violence is here employed, it may, with great safety, be early had recourse to. In half an hour the effects of this method are conspicuous, and we can determine if delivery will be in this way accomplished.

XVII. These then are the different methods of inducing a commencement of labour; and its progress may be accelerated by the application of the same stimulus to the os tincæ, where pains have naturally occurred, and are too weak to have much influence; or

or as ſoon as the dilatation has a little advanced, it will be performed more effectually by the perforation of the membranes; thus evacuating the waters, and admitting a more general contraction of the organ. As ſoon as the waters are diſcharged, where the patient is not very much exhauſted, the delivery is commonly very quick, and their evacuation therefore is a great point to be had in view in all caſes of hæmorrhage; as even where the placenta is unfavourably ſituated, ſtill the flooding is, for ſome little time, generally checked by it.

XVIII. The advantages that ariſe from this natural mode of delivery are very juſtly pointed out by Mr. Puzos, in his compariſon of the natural and manual claſſes of labour, the other method recommended in this ſituation.

In all manual labours, or in order to change the poſition of the fœtus, the natural power of the uterus muſt be counteracted. In flooding caſes, however, this power or action we already find too weak. Hence, after the placenta in theſe caſes is removed from the efforts employed in delivery, joined with its natural weakened ſtate, there is great danger of its not contracting at all, and of the hæmorrhage ſtill continuing. In the other caſe, by merely aſſiſting the natural efforts, its powers are increaſed, which can likewiſe, without any harm, be early begun, ſo that the patient here has a greater chance. As the contraction of the uterus proceeds gradually in this way to expel the child, we are alſo certain, on delivery, it is ſo far contracted as to ſtop the hæmorrhage; but unleſs begun early, it may be laid down as a rule, that the natural method cannot be truſted to. If in a firſt labour alſo, as we are uncertain.

of the ſtate of the external parts to admit delivery, its ſucceſs is doubtful; and wherever difficult labours have occurred formerly from the confinement of the bony ſpace, it would be highly reprehenſible.

XIX. For theſe reaſons pointed out, in ſpite of Mr. Puzos's obſervation, that a greater number of women die after delivery by the artificial method, the latter is to be preferred, as giving us the delivery at once in our power.

XX. The chief circumſtances requiring attention in the artificial delivery, to render it here ſucceſsful, are—

1. In conducting the different ſteps of it as ſlowly as the ſituation of the patient will allow; and,

2. In ſupporting the patient under it; for being attended with ſome degree of violence, the latter, in her weak ſtate, requires to be rendered as bearable as poſſible.

XXI. With a view to this laſt circumſtance, then, cordials ſhould be liberally employed, as a temporary additional ſtrength is abſolutely requiſite, even though in the interims the flooding ſhould be a little increaſed. It is generally deliquium which, in this ſituation, proves fatal. The preventing it, therefore, for a certain time, till delivery is completed, is highly neceſſary; and even after delivery: for, as every increaſe of circulation muſt muſt induce a primary increaſed action of the ſolids, the contraction of the uterus after delivery will be promoted by this very means.

XXII. The method of performing here the artificial

delivery, or reducing it to a footling caſe, whatever preſentation may occur, is ſimply this:

Let the patient be placed in the uſual ſituation of delivery on her left ſide; or if a young practitioner, for the more eaſy acceſs of the hand, ſhe may be placed in the ſame way as in inſtrumental labours, on her back, with her thighs extended. A roller is then to be put looſely round the abdomen, and an aſſiſtant with ſome cordial is to be ready at hand. The operator, then kneeling before the bedſide, introduces his hand lubricated, firſt gently ſtretching the os externum and vagina, and removing from the latter any coagula, with which it is generally filled, preventing his approach to the os uteri, and rendering it often difficult to be felt. When the os uteri is reached, let a finger be inſinuated into its orifice, which will generally be found ſo open from its lax ſtate as to admit its introduction. When once introduced, roll it round, ſo as to increaſe by its irritation the dilatation of the aperture, in conſequence of which the reſt of the fingers will come to be gradually admitted, and the hand at laſt paſs into the uterus. When the hand is thus paſt, the fœtus, with the incloſing membranes, will be found. Before rupturing them, let the preſenting part, which will be eaſily felt, be turned to the *feet*, and, then evacuating the waters, let the feet be brought into the vagina. As ſoon as the membranes are broken, the flooding, from the contraction of the uterus, generally abates, and labour-pains, though perhaps trifling, commence, and there is then no occaſion to precipitate the delivery, for a ſudden evacuation of the contents of the uterus proves very often fatal. Let the operator, therefore, reſt a little, and ſome cordial in the interim be adminiſtered to the patient; while the roller round the waiſt is then to

be tightened, and the preſſure of an aſſiſtant's hand applied alſo to the abdomen. The delivery is afterwards to be completed in the ſame manner as directed in footling preſentations; and, after the extraction of it, time is to be allowed as uſual for the contraction of the uterus and complete ſeparation of the placenta.

XXIII. From what has been delivered on flooding caſes, the concluſions to be drawn, are—

1. That whenever the pulſe begins to turn feeble, with coldneſs of the extremities, and indiſtinct viſion, delivery is then, perhaps, too late to ſave the patient.

2. Where the flooding is accompanied with ſome ſlight pains, theſe are to be encouraged; for the ſtronger or more active the action of the uterus, the greater chance there is of its contents being naturally expelled.

3. Opiates are never to be exhibited in caſes of flooding, a practice often employed,—as, by weakening the power of the uterus in their ſecondary efforts, they favour the increaſe of hæmorrhage.

4. Wherever a flooding occurs, without the ſmalleſt previous pain, or any ſenſible external cauſe, delivery will, in the end, be found abſolutely requiſite.

5. Of flooding caſes, we are to conſider two-thirds, at leaſt, as proving fatal.

XXIV. Theſe floodings have been hitherto treated which precede labour. They happen, however, frequently during the progreſs of labour itſelf; and unleſs very violent, we ſhould not attempt to expedite the delivery. They are oftenеſt met with in tedious caſes, towards their termination, and there is danger here of their continuing alſo after delivery. This circumſtance ſhould be attended to, and precautions taken.

XXV. Floodings, when not fatal of themſelves in geſtation, often lay the foundation of a number of maladies which affect the conſtitution for life. It is ſurpriſing, however, with women, how ſoon a loſs of blood is repaired, and which in the other ſex would have never been got the better of. The complaints which generally ſucceed profuſe floodings are—

1. Violent complaints of the head.
2. Irregular uterine health.
3. Future abortions; and,
4. Œdema of one of the extremities, ſometimes general dropſy.

The firſt conſiſts, generally, of violent pain or conſtant giddineſs, and they are always worſt in the night. They commonly laſt two or three months, unleſs the patient is of a nervous habit, and naturally prediſpoſed to them, when they continue much longer. The only palliatives are time and opiates; for, as the conſtitution comes to be repaired, by a generous diet, they gradually depart.

With reſpect to the ſecond, there are inſtances of the patient being for years without the appearance of the menſes, or ſubject to fluor albus, which is always a very diſagreeable complaint; and conception here never takes place till it is removed.

The remaining conſequences of theſe floodings were formerly treated under their proper head.

2. *Convulſions.*

XXVI. The ſecond diviſion of this ſpecies of labour

comprehends thoſe caſes complicated, with convulſions—an accident even more fatal than the former.

Every appearance of convulſions in labour is to be conſidered as alarming. Their attack is generally ſudden; and the ſymptoms preceding them are violent pain of the head (chiefly the forehead), ſtaring or wild motion of the eyes, which appear red and turgid, and general fluſhing of the face.

XXVII. The cauſes of this affection in labour may be reduced to three heads.

1. Morbid irritability of the os tincæ. Hence it is frequent in a firſt labour, and in this caſe a proof of it: the vagina too feels ſo painful and irritable, as hardly to bear examination.

2. Over diſtenſion of the uterine cavity. Thus it often occurs in caſe of twins, and affords, even before the delivery of the firſt, a proof of them.

3. Preſſure on ſentient parts ſympathiſing with the brain. It is for this reaſon it is not uncommonly met with in præternatural caſes.

XXVIII. Our prognoſis in ſuch caſes is determined by an attention to three circumſtances,—their *frequency*, *duration*, and *effect*.

With reſpect to the firſt, many have never more than a ſingle paroxyſm without any repetition; others have them frequently in time of labour, as twelve in the courſe of eighteen or twenty in the twenty-four hours, and that even without any danger; ſo that leſs ſtreſs is to be laid on this circumſtance, and even the more ſo if the patient has been formerly ſubject to the diſeaſe, or

to hyſteria in a violent degree. It is ſurpriſing they often obſerve a periodical recurrence, or regular diſtance between the paroxyſms, ſo that you can count on the repetition of their attack within a few minutes.

In regard to the ſecond circumſtance, or their duration, we obſerve that in ſome they laſt a much ſhorter time than in others. The ſymptoms alſo are in ſome leſs exquiſitely marked, and approach more to the nature of hyſteria, while in others the paroxyſm is often ſo violent as to prove fatal at once.

The third circumſtance, or their effect on the ſyſtem after the paroxyſm is finiſhed, has been moſt generally attended to in forming a prognoſis. Thus we find, that recollection in many returns as ſoon as the paroxyſm is ended, or at leaſt in a few minutes afterwards. In others the ſenſes ſeem altogether ſuſpended, when the patient either continues in a ſtate of ſtupefaction, or delirium ſucceeds. In this laſt ſituation they generally, though not always, prove fatal.

XXIX. A prognoſis may alſo be drawn with reſpect to their influence on the labour itſelf. Thus, where ſlight, the labour-pains are generally aſſiſted by them, or rendered more effectual. Where very violent, again, the child is either ſuddenly thrown off in a paroxyſm, or the uterine efforts are entirely ſuſpended.

XXX. For the treatment of convulſions in labour, two methods prevail, which in different ſituations are both equally proper.

The firſt is merely palliative, and truſts entirely to

nature, after obviating ſymptoms for the accompliſhment of delivery.

The other conſiſts in aſſiſting the palliative treatment, by the application of mechanical means, as ſoon as in our power to facilitate the progreſs of labour.

XXXI. In executing the former, three indications come to be formed.

1. The firſt is to leſſen primary irritation in the original affected part, which, being the uterus, we attempt it by a full doſe of opium in glyſter, at once taking off its irritability; and its effect in leſſening the action of the uterus, in theſe caſes, where turning is required, ſufficiently points out its propriety.

2. The ſecond is to remove diſtenſion from the ſyſtem in general, and particularly from the ſeat of the diſeaſe, which is beſt performed by copious veneſection; and,

3. The third is to excite a more powerful and ſudden irritation in the ſame ſituation. This is beſt and expeditiouſly executed by the application of cold water to the face, according to the practice of Dr. DENMAN. The ſame thing has been propoſed by bliſters, the uſe of ſternutatories; but theſe, on many accounts, are unſafe, and the application of cold bathing will be found more ſucceſsful.

XXXII. This mode of treatment detailed is pointed out in thoſe ſituations where the convulſions appear along with labour as a conſequence, and nature may be generally truſted to finiſh the proceſs. But where convulſions precede the appearance of labour, our prognoſis is generally leſs favourable; and along with the former

treatment, as ſoon as the forceps can be applied, we have recourſe to their aſſiſtance to finiſh the delivery.

XXXIII. Formerly it was the cuſtom in ſuch caſes, before the uſe of the forceps was known, to attempt expediting the delivery by turning, as appears by conſulting the authors before the time of Dr. SMELLIE; but the conſequence of this practice was, that, from the violent irritation produced, though they accompliſhed delivery, yet the convulſions continuing, generally proved fatal.

3. *Prolapſed Funis.*

XXXIV. The third diviſion of anomalous labours, conſiſts of thoſe caſes, where the funis is prolapſed before the head. It depends on the early rupture of the membranes, from the waters being in too great quantity, and preſſing down with too much force, before the head is ſo engaged in the paſſage as to prevent the deſcent of any other part. The conſequence of this deſcent, from the compreſſion of the cord, muſt be the death of the child, by intercepting the circulation between it and the placenta, which, till it is once expelled from the uterus, remains ſtill neceſſary to continue its exiſtence.

XXXV. In managing this kind of labour, two methods have been recommended; either,

1. The replacement of the cord behind the preſenting part; or,

2. The total alteration of the preſenting poſition, to remove the danger of preſſure.

XXXVI. With reſpect to the firſt, it can only be performed when the prolapſed part is early perceived, when the head is not rivetted within the paſſage, and when the cord retains ſtill its natural warmth and pulſation. In this ſtate the head is to be prevented from advancing farther in the time of a pain; and as ſoon as it departs, and the uterine preſſure is taken off, an attempt is to be made to carry the cord beyond the head, retaining the hand in the paſſage, to ſupport it when once replaced, till the action of the uterus, preſſing forward the preſenting part, engage it ſufficiently in the paſſage, ſo as to hinder the future deſcent of any other part.

XXXVII. With reſpect to the ſecond, though it is recommended by many authors, it can only be employed with ſucceſs at the time the water flows off, and the head is not engaged in the paſſage; for if the latter is allowed to deſcend before the hand can be got beyond it, or ſo far into the uterus as to reach the feet, a ſufficient degree of preſſure on it will have taken place to intercept the circulation, and then the circumſtance which the turning was intended to prevent has already happened,—ſo that in this way it comes to be of no ſervice to the child, and will eſſentially hurt the mother. Theſe difficulties of turning occurred to many authors,—a new practice was preferred, where the replacement of the part cannot take place; viz. to expedite the delivery according to the preſentation, by means of the forceps. But whoever is acquainted with the uſe of the forceps muſt allow, that, in the greater number of caſes, before the extraction can take place, the circulation from the compreſſion of the cord for a conſiderable time muſt have ceaſed.—Wherever therefore the replacement of the cord cannot be effected, the death of the child may be

always expected; and the wrapping the prolapsed part, according to the idea of some, in a warm cloth, will not have the smallest influence upon the circulation.

4. *Plurality of Children.*

XXXVIII. The last division of anomalous labour includes a plurality of children; and till the expulsion of the first, we have no certain signs by which we can determine the presence of more than one, whatever authors may pretend by their enumeration of them.

XXXIX. The signs commonly mentioned, as distinguishing a plurality of children, are—

1. The vast distension of the uterus: though an unusual quantity of water may produce this, where there is but one.

2. A sort of cleft or hollow in the middle of the abdomen; but this does not always happen; for their membranes lie generally so close, that they form but one round tumour; yet there is frequently a sensible difference of the abdomen from what takes place in any former pregnancy.

3. The motions of the child are more troublesome and frequent than in case of a single child; but we find the motions of children so various in different pregnancies, that no stress can be laid upon this.

4. The labour is generally premature, or wants some weeks of the proper term which the woman used to observe in former pregnancies. But nothing is so various as the calculation of women, with respect to the time of gestation; and I have known them mistaken in several months. If, however, a woman who has borne children

takes her reckoning from the attack of ſome particular complaint, occurring at a certain period of geſtation, and finds, on the commencement of labour, that ſhe wants ſome weeks of her proper time, without any evident cauſe to account for it, a good deal of dependence may be laid on this circumſtance.

5. The laſt ſymptom of twins mentioned is the complaints of pregnancy, more ſevere than in any former geſtation; but this may be influenced by a number of conſtitutional circumſtances, not ſo apparent.

XL. Theſe are the ſeveral ſymptoms that give ſome ſuſpicion of twins before delivery; but after the expulſion of the firſt child, more certain marks then occur,—which are,

1. The bulk of the abdomen, not conſiderably decreaſed, and having a degree of hardneſs to the touch.

2. Great difficulty in attempting to extract the placenta, which does not yield; and,

3. The continuance of the pains, for the moſt part pretty ſtrong.

XLI. For the delivery of twins two methods are recommended;—the one, immediately to have recourſe to it on the expulſion of the firſt; the other, to leave it to nature, and wait the contraction of the uterus, and a return of pain, to accompliſh it.

XLII. The arguments in favour of the firſt are,—the eaſe of completing it, and the uneaſineſs of the patient from her former ſufferings, with the conſequences that may ariſe from leaving it, as dangerous, &c. For theſe reaſons, the favourers of nature have generally given up their waiting for a return of her exertions; and, in all caſes of twins, the practice at preſent is, after the expul-

ſion of the firſt, the hand is to be introduced into the uterus, and the membranes of the ſecond broken. If the preſentation is right, and the head beginning to be forced down by the pains, it ſhould be allowed to advance in that direction; but if no pains have occurred after the delivery of the firſt, or, the patient being exhauſted, they do not ſeem likely to occur before the membranes are broken, the child is to be turned, and the lower extremities placed towards the vagina, when it is reduced to a footling caſe, and then we have the full command of the delivery.

XLIII. It is needleſs, as ſome authors have done, to particulariſe caſes of twins; it is ſeldom that they come both in the natural poſition; and where either of them preſents unfavourably, the ſame rules will here apply as formerly directed for ſuch deliveries in the caſe of one. There is only this caution to be obſerved, if the preſentation of the firſt is unfavourable, and you have occaſion to turn, when your hand is introduced into the uterus, as the membranes of both are ſometimes ruptured at the ſame time, be cautious that you do not miſtake a member of the one child for that of the other, as they are generally placed, where this rupture of both their membranes happens at once, in a confuſed manner.

XLIV. In extracting the placenta of twins, both cords are to be joined together, and graſped in one hand; and if not eaſily ſeparated from the uterus before employing violence, the hand is to be introduced into its cavity as uſual, though a longer time is in this caſe to be given if allowable, and not prevented by the attacks of flooding from the ſlow contraction of the organ in conſequence

of over diſtenſion; for the inactivity or inertia of author is here a very common and evident cauſe of retention.

XLV. Beſides twins, a greater number of children are, at times, met with; but theſe are very rare, and the ſame rules will apply for their delivery as in caſe of twins. The delivery will, indeed, be eaſier here, as according to their number they are in general proportionably ſmall *.

5. *Extra-Uterine Labour.*

XLVI. Under this head of anomalous labour may, perhaps, be conſidered the termination of *extra-uterine* conception. When the fœtus remains in the ovarium, though it never acquires the ſize of one formed in the uterus, yet it has been known to equal in bulk the regular production of five or ſix months. After this, when the death of the mother did not happen from its burſting the ovaria, it has gradually decayed, and in a number of years, perhaps fifteen or twenty, on the expiration of the patient, its former exiſtence has been diſcovered by diſſection, conſiſting then only of a few bones.

* Many years ago, when aſſiſtant to Dr. HAMILTON, profeſſor of midwifery in the univerſity of Edinburgh, the author had the good fortune to meet with a caſe of four children at a birth.—The ſubject of it was a woman paſt forty years of age,—ſhe never had had any children before, and was at this time, when he firſt ſaw her, ſix months gone; but had the appearance, from her ſize, of one at full time.—After delivery, three of them ſurvived twelve hours, and the other was born dead. They were all very ſizeable for their time.—This caſe is related by Profeſſor HAMILTON, in his Outlines of Midwifery. The patient was viſited by Dr. STEWART of Edinburgh, and ſeveral other medical gentlemen at the time.

XLVII. This ſpeciès of conception is generally during life miſtaken for ſchirrus, or dropſy of the ovarium. It is in this ſituation previouſly marked by the common ſymptoms that attend pregnancy. The uterus alſo enlarges to a certain degree; and at a certain period, or the term of reckoning, ſomething like labour-pains are felt to commence. They continue for a time, and then entirely ceaſe. Afterwards morbid ſymptoms only occur at times in the ſeat of conception, or in the ovaria.

XLVIII. The ſame conſequences have followed conceptions remaining in the tube, as in the ovaria; and they are likewiſe marked by the ſame train of ſymptoms: nor has the abdomen itſelf been wanting as a ſeat for the rudiments of the fœtus, in its paſſage from the ovaria. In the abdomen the production has been known to equal in ſize a fœtus produced in the uterus itſelf. The woman feels commonly in this caſe the motion of the child at the uſual period, though the cervix uteri and os tincæ, remain pretty much the ſame, on examination, as in the unimpregnated ſtate,—the fundus being the diviſion chiefly affected in extra-uterine conceptions. At full time, ſomething like the effort of labour takes place here, by an uncommon ſtirring on the part of the child; after which there remains only a ſort of conſtant weight and heavineſs in that place; and often, in a ſeries of years, by making a paſſage for themſelves, its members come to be expelled through ſome part of the abdomen, or even at the rectum; and the tendency to this expulſion is marked by the occurrence of pain and inflammation at theſe parts, with the preſence of hectic fever. When the fœtus is known to be in this ſituation,

delivery may be accompliſhed by means of the Cæſarian operation, of which a remarkable inſtance is recorded in the ſecond volume of the Medical Commentaries; where twins were ſucceſsfully extracted, and the patient completely recovered, though previouſly reduced to the laſt ſtage of emaciation. Farther caſes are to be found of this ſpecies of conception in the different periodical publications.

BOOK IV.

OF CHILD-BED.

I. BY delivery, a new habit of body is evidently induced, different from what prevails during the former period of pregnancy; and this habit may be defined *a peculiar ſtate of debility*, with an *increaſed action* of the ſyſtem, as diſplayed by the pulſe, and various ſymptoms of irritability.

II. That this ſtate of debility muſt be conſiderable, is plain, when we conſider,—

1. The very great degree of relaxation the removal of the uterine contents muſt produce, the expanſion of which completely fills the abdomen, and for ſeveral months impedes the functions of the principal organs.

2. The ſuddenneſs of this removal, before the ſyſtem is prepared for ſuch a change; and hence the tendency to ſyncope, which ſo often takes place.

3. The great diſcharge of blood which follows the removal of the placenta, and acts as an additional power in increaſing this ſtate.

III. This ſtate of debility, from its rapid production, we find poſſeſs an inſtantaneous effect on the pulſe. It, for the moſt part, immediately riſes, and in ſome caſes

continues above 100 beats in the minute, for ſeveral days, and that without any particular ſymptom of diſeaſe. It then becomes in an oppoſite extreme proportionally low, and is often, in the courſe of a fortnight after delivery, under 60.

IV. With the pulſe the nervous ſyſtem becomes alſo affected. All the ſenſes are uncommonly vivid, and the mind is eaſily agitated by the ſlighteſt impreſſions, which have at this time a powerful influence. Hence the tendency to mania which is to be remarked in many patients in child-bed, although perfectly free from any appearances of it at all other times; and the watchfulneſs which ſeveral women experience for many days and nights together. Hence alſo the powerful effect which the leaſt ſurpriſe or fright is apt to occaſion, and which has been known in certain caſes to produce death.

V. This ſtate of the nervous ſyſtem (deſcribed IV.) is alſo increaſed by the continuance of pain itſelf. Though the removal of the placenta frees the uterus of its contents, yet it is ſome time before the fibres, extended for ſuch a length of time, regain their natural contracted ſtate; and for this purpoſe their action is exerted in a ſlight degree, forming what are called *ſecondary* or *after-pains*. They generally come on in a few hours after delivery. They alternate with intervals of eaſe, like the former. They are commonly worſe every ſucceeding delivery, being very ſlight at firſt, depending on the degree of weakneſs in the tone of the organ. Their duration ſeldom in any caſe exceeds three days, though they are often to many women more diſtreſſing than the pains of labour.

VI. Though this is the general opinion entertained on the cauſe of after-pains, yet ſome objections may be be offered to it; for,

1. They do not occur in a firſt labour, where, though the uterus is conſiderably elaſtic, ſtill it cannot regain its original ſtate at once.

2. Nor do they come on for ſome time after delivery, when the irritability of the uterus is then greateſt, and its contraction moſt powerful. The cauſe, therefore, impelling this uterine contraction, may be more aſcribed to the natural circulation of the organ returning after the violent collapſe that emptied its veſſels completely on the birth of the child; and they continue therefore till once this regular circulation is eſtabliſhed.

VII. Theſe pains (V.) are attended with a diſcharge of fluid, which continues to flow ſlowly for ſeveral days, and is termed the *lochia*, or *cleanſings*. For two or three days, ſometimes longer, it retains the red appearance. It becomes then more ſerous, and acquires at laſt a greeniſh caſt. This diſcharge is moſt profuſe in relaxed weakly patients, and departs ſooner in the more vigorous and robuſt. Its quantity may be rated from lb.ſs. to lb.i. and upwards. The ſize of the placenta, or extent of uterine ſurface it covers, has an effect in the quantity diſcharged at firſt. Women themſelves are very attentive to the flow of this diſcharge, and conſider the quantity as having an effect on their recovery. It is certain, that in all caſes of puerperal diſeaſe this diſcharge is more or leſs affected, and its ſtate, therefore, deſerves perhaps more conſideration than is generally paid to it. As its amount, however, as well as the continuance of it, vary ſo much in different ſubjects, we can form no certain judgment with reſpect to it.

VIII. About the time it begins to lose its red appearance, or often sooner, the breasts are felt swelled and painful, from the distension of the milk; previous to which, if the quantity is considerable, or the evolution of the breast difficult, some slight symptoms of fever occur; but these, when the child is applied, and the flow brought to take place, soon depart. This application of the child should never be later than 24 hours after delivery, and should not be carried far at first; and for two or three days the previous symptoms of debility, to the feelings of the patient, rather increase.

Management of Child-Bed.

IX. Having thus ascertained the state of body which prevails in child bed, its proper treatment becomes the next object of attention: and, proceeding on the symptoms enumerated, three indications come to be formed, with this view:

1. The first and leading one is to counteract debility, which is present in such a strong degree.

2. The second is to remove pain; and,

3. The third is to prevent, as far as possible, the attack of any disease incidental to the puerperal state.

X. To perform the first, some cordial, as a temporary expedient, is generally administered; and, as a more permanent application, in adjusting the dress of the patient, a roller is brought round the belly with some degree of tightness, to imitate the former tense state of those parts.

XI. For the second, an opiate is generally employed, and continued every night till the pains subside. These pains, however, assume at times the form of perma-

nent ſpaſm, which may be known by applying the hand externally to the abdomen, when the knotty irregular feel of the uterus will be diſtinguiſhed. The treatment, beſides the opiate, requires then the further aid of fomentations, and an attention to the ſtate of the inteſtines, till the ſpaſm is relaxed.

XII. To execute the third indication, the chief means are, a regular attention to the ſtate of the primæ viæ, and the regulating the diet of the patient. As coſtiveneſs is a natural complaint of pregnancy, to prevent its continuance in child-bed after the ſecond day, a glyſter, or mild-laxative, if neceſſary, ſhould be regularly adminiſtered,—as, the magneſia, cream of tartar, &c.: and this repeated every other day till the tone of the bowels is recovered.

XIII. The proper diet in child-bed is a ſubject which has much divided practitioners at different periods. It is now ſufficiently clear that women have hitherto been kept too ſpare; and, in directing it, regard ſhould be had to three circumſtances:

1. The nature of the labour.
2. The patient's habit of life; and,
3. Her intention with reſpect to nurſing.

XIV. With reſpect to the firſt, if the labour has been protracted, or means employed to aſſiſt it, which may have induced a tendency to inflammation, it will then be moſt prudent, for at leaſt the firſt week, to confine the patient ſtrictly to a vegetable diet.

In regard to the ſecond, if accuſtomed to live well, and of a delicate or nervous habit, from the firſt day

animal food, in a certain proportion, may be allowed; and that either in a ſolid or fluid form, as moſt agreeable.

XV. On the third circumſtance it is to be obſerved, where nurſing is not intended, the ſame reſtriction ſhould take place in the uſe of a vegetable diet, as after a difficult labour; and this further reſtriction ſhould be joined to it—a rigid abſtinence from the uſe of liquids, as much as poſſible, for ſome time.

XVI. When theſe circumſtances are duly attended to, the recovery of the patient proceeds without interruption; and, about the third, fourth, or fifth day, the patient is firſt taken up, to have her bed adjuſted, and her linens changed, the evening being preferred on this occaſion. She is generally next day, as a matter of precaution, confined entirely to bed. After that period, ſhe is daily allowed to ſet up for an hour or two in the evening. After the firſt week ſhe generally ſits up to dinner, reclining above the bed afterwards; and in this way gradually lengthening her time out of bed, in the courſe of three weeks in ſummer, and four in winter, ſhe is able to go abroad; previous to which, cuſtom has introduced the exhibition of a doſe or two of phyſic, as a neceſſary precaution.

Diſeaſes of Child-Bed.

XVII. This then forms the management of child-bed in its moſt favourable circumſtances: we are next to conſider it as a real morbid ſtate, when complicated with diſeaſe.

XVIII. The diſeaſes of child-bed may be divided

into thoſe which are the immediate conſequence of delivery, and thoſe which form merely an accidental occurrence.

XIX. The former conſiſt of either temporary affections or partial injuries.

The latter of fevers, whoſe attack at this period gives a peculiarity to their ſymptoms.

XX. The temporary affections, which at times ſucceed delivery, and prove embarraſſing to practitioners, are faintings and hæmorrhage.

Temporary Affections.

Faintings.

XXI. Faintings here are of two kinds, either the ſimple hyſteric deliquium, or the actual ſyncope.

In the former the pulſe continues to be felt, the heat of the body and reſpiration are little altered, and a temporary ſuſpenſion of the fit is procured by volatiles.

In the latter, an alarming coldneſs enſues; conſiderable oppreſſion and ſuffocation prevail; the pulſe is indiſtinct; no intermiſſion occurs; and an hour or two decides the fate of the patient.

XXII. In forming, therefore, a prognoſis, the ſtate of the pulſe and reſpiration are to be our guide; for where they are little effected, no danger attends.

XXIII. The treatment here conſiſts in promoting the vigour of circulation, by a ſupine poſture and compreſſion, as already directed; by the free admiſſion of air; by the uſe of mild cordials internally; and by the occaſional application of volátiles to the noſe and head; and where there is ſuſpicion of hæmorrhage being the cauſe, a proper examination ſhould take place by carrying the finger within the os uteri.

Hæmorrhage.

XXIV. Puerperal hæmorrhage is diſcovered chiefly by the debility induced, as indicated by the ſtate of the pulſe, and other ſymptoms. It is, in every caſe, alarming; but where protracted beyond ſix or ſeven hours, has ſeldom proved fatal.

XXV. Its cauſes are either the circumſtances of the previous delivery affecting the ſtate of the uterus, or improper regimen accelerating the circulation—the firſt depend on either an atony of the organ preventing its contraction, or diſtenſion of its cavity from coagula. Theſe coagula are particularly apt to be formed where the os tincæ retains more power of contraction than the fundus.

XXVI. From the rapid effects of hæmorrhage here, its progreſs muſt be checked by the ſpeedieſt means, of either inducing general deliquium, or exciting contraction of the uterus. The firſt is effected by raiſing the patient inſtantly to the upright poſture, till fainting enſues. The ſecond is performed by different ways of applying cold to the uterine region, as daſhing cold water ſuddenly

on the abdomen; applying cloths, dipt in cold oxycrate, to the back; injecting cold water, with a bag and pipe, into the uterus; and theſe failing, by mechanical irritation of the organ itſelf; introducing, for this purpoſe, a finger into the os uteri, and rolling it round, ſo as to excite its contraction.

XXVII. When the hæmorrhage is ſomewhat abated, opiates, in ſmall doſes, are to be adminiſtered, that no ſickneſs may enſue, and nouriſhment is to be thrown in, in the mildeſt form.

Partial Injuries.

XXVIII. Partial injuries are a frequent conſequence of delivery, and equally ſucceed a natural and eaſy labour, as thoſe of the more complicated ſpecies.

Swelling of Genital Parts.

XXIX. The firſt of theſe to be noticed is a ſlight ſwelling of the genital parts, the uſual effect of a tedious labour, or a firſt child; it is generally attended with a ſlight ſuppreſſion of urine, which continues for ſome days.

XXX. The treatment of this complaint depends on the uſe of fomentations and emollients, and the occaſional introduction of the catheter, ſhould the exhibition of an injection fail; or in place of the catheter, a finger being paſſed into the vagina, the uterus may be raiſed up, and thus, the preſſure being taken off the neck

of the bladder, the urine will probably flow; but in no caſe, if it fail, ſhould the ſuppreſſion be allowed to exceed eighteen hours, without the uſe of the catheter.

Laceration of Bladder of Urine.

XXXI. A more formidable degree of this complaint is found at times to ſucceed inſtrumental labour; and inflammation, with laceration of ſome of the ſoft parts, takes place: much depends on the particular ſeat of the injury for the iſſue of the complaint; if either the inflammation or laceration affect the anterior part of the vagina, or neck of the bladder, it forms, in the ſequel, one of the moſt melancholy complaints that can attend humanity, as a conſtant dribbling of urine takes place for life.

XXXII. This injury ſeldom diſcovers itſelf for eight or ten days after delivery; but it may be ſuſpected previous to this actual diſcharge of urine, whenever a ſuppreſſion continues above twenty-four hours after delivery, attended with a ſenſe of a particular foreneſs and pain in one ſpot.

XXXIII. The diſeaſe is, in every caſe, to be conſidered as incurable; for the bladder being prevented from diſtending, it naturally thickens, and forms afterward a ſtronger reſiſtance than natural to diſtenſion, by the acrimony of the urine; the parts alſo, as it continues, become callous, and thus the proſpect of recovery is entirely loſt. To palliate other ſymptoms, and leſſen the ſtrong urinous ſmell which the patient acquires, fre-

quent bathing of the parts is neceſſary; while, for the cure itſelf, the indications pointed out are,

1ſt, To form a preſſure againſt the lacerated part, preventing the exit of the fluid.

2dly, To prevent any irritation on the bladder, in conſequence of diſtenſion, by ſoliciting a regular diſcharge; and,

3dly, To aſſiſt, by internal remedies, the powers of the ſyſtem; to repair this laceration of the part. The firſt of them has been attempted by a variety of different applications, particularly the ſpunge peſſary, ſoaked in a Saturnine ſolution, and fitted to the part. When failing, the preſſure of the gravid uterus itſelf, in a future pregnancy, has been known to ſucceed; the ſecond indication is anſwered by the occaſional uſe of a bougie; and the third conſiſts in a proper exhibition of the bark, and other tonics, with the application of the cold bath, &c.

Incontinence of Urine.

XXXIV. An incontinence of urine is alſo known to ſucceed delivery, from ſimple atony of ſphincter. It is to be diſtinguiſhed from the above complaint, chiefly by examination, and the paſſing a catheter, which will be found bare at the ruptured part.

In the treatment, little is to be done but obſerving cleanlineſs, by a thick compreſs applied on the pudendum, to ſoak up any moiſture, and frequently changing it, till the tone of the part is reſtored.

Laceration of Perinæum.

XXXV. The laceration of the perinæum is, at times, a conſequence of labour, particularly when rapid; and in a firſt caſe, when the pains are uncommonly ſtrong, or the preſentation in a more bulky form than uſual, as the face or breech. When the laceration is ſideways, there is little danger, and, by a cloſe contact of the thighs, a re-union, in a ſhort time, is effected; but when laceration is backwards, and extends to the rectum, a more ſerious evil ariſes in the diſcharge of the fæces, through the laceration. The treatment, however, is the ſame; and cleanlineſs is particularly to be attended to.

Rupture of the Uterus.

XXXVI. From the ſame injury that affects theſe external parts, the uterus itſelf is not exempted, at times, in conſequence of delivery. A rupture of the uterus has been frequently induced by the forcible efforts of the operator in turning caſes.

Such accidents cannot fail to prove generally fatal, though ſome inſtances of unexpected recovery have occurred. So ſoon as this injury is diſcovered, delivery ſhould be expedited as ſoon as poſſible, and every means of obviating pain and inflammation attempted.

Inverſion of the Uterus.

XXXVII. Another accident, no leſs fatal than a rup-

ture of the organ, is its inverſion. It is always the effect of violence in pulling the placenta, particularly where the cord is inſerted at its middle; for if violence is then uſed, and the adheſion of the placenta to the uterus ſtrong, ſo as not to yield, and this exertion is made during the ſtate of atony, which prevails in the uterus immediately after the birth of the child, it will firſt come to be dimpled; and the woman, employing her efforts from the irritation of the operator in pulling, this will proceed till the fundus is completely drawn through the external orifice.

XXXVIII. When this is effected, no return of the protruded part can be made, which is cloſely graſped by the contraction of the neck round it. The patient is generally ſeiſed with faintings, and death commonly enſues in a very ſhort time. To prevent this accident, no attempt ſhould at any time be made to remove the placenta till the contraction of the organ feel to the hand of the operator in the form of a round hard ball, immediately above the pubes.

Cows are very ſubject to this accident, of the inverſion of the uterus. If ſoon replaced, they recover; and, in order to retain it, a ligature is placed on the pudendum.

Inflammation of the Uterus.

XXXIX. Inflammation of the organ is an affection that at times attends the child-bed ſtate. It conſiſts in a fixed throbbing pain in that part of it which has been injured, attended with a conſiderable degree of fever,

and it continues often for ſeveral months, before it appears, by ſwelling and hardneſs, to point to ſome particular ſpot.

XL. This affection commonly commences about the fourth or fifth day after delivery, often conſiderably later; it is ſeldom fatal, though apt to remain long.

XLI. Its treatment conſiſts in the general means of obviating inflammation by veneſection, as indicated by the pulſe, by warm fomentations of the abdomen, and, ſhould a tendency to a ſuppuration be diſcovered, by the application of poultices to that particular part, while its termination is farther haſtened by the internal uſe of bark and opium.

Prolapſus of the Uterus.

XLII. The laſt effect of delivery to be noticed is the prolapſus uteri, or deſcent of the organ. It is moſt liable to occur in women in low life, who are obliged, in conſequence of their ſituation, to riſe early, after delivery, while the parts are yet in a very relaxed ſtate; it exiſts in various degrees, from which it has received different appellations, and has at times been known entirely protruded beyond the external parts.

XLIII. The ſimple prolapſus moſt uſual occurs. It is diſtinguiſhed by the appearance of the os tincæ at its inferior part; and, previous to this, it is preceded by a ſlight degree of uterine pain or bearing down, which gradually increaſes, and produces more or leſs difficulty, and even ſuppreſſion of urine.

XLIV. The cure of this complaint is attended with ſome difficulty, and three circumſtances tend to counteract it.

The firſt is the weight and preſſure of the organ itſelf, which poſſeſſes a tendency to gravitate downwards.

The ſecond is the relaxed ſtate of the vagina, which is unable to give it any ſupport; and the third is the ſlight reſiſtance of the ſphincter at the os externum.

XLV. In young ſubjects, the reduction of prolapſus is eaſily effected, and it yields to confinement, to a horizontal poſture: the uſe of ſtyptic waſhes frequently applied, and general tonics, as the bark, ſteel, and cold bathing. But when the diſeaſe has continued long, the deſcent of the uterus complete, and the patient in advanced life, this ſimple treatment is ineffectual, and recourſe muſt be had after its reduction to mechanical means for its ſupport. This conſiſts in the uſe of different kinds of peſſaries, as afterwards taken notice of.

Fevers.

XLVI. We have now examined the firſt claſs of child-bed diſeaſes, which are the immediate conſequence of delivery. The ſecond, or the various forms of fever, that occaſionally attack this ſtate, merit next our attention.

Weed.

XLVII. The moſt frequent of this claſs is the ephemera, or weed, which may be defined a fever, ſudden in its attack, marked by a violence of rigour, and in every reſpect reſembling the fit of an intermittent.

XLVIII. Like the intermittent, the fit is terminated by a profuſe ſweat, which, if properly managed, proves the criſis of the diſorder; but if exceeding, in continuance, twenty-four hours, it frequently paſſes into continued fever.

XLIX. This affection is liable to be induced by the ſlighteſt irregularities in regimen, expoſure to cold, evacuations, paſſions of mind, &c. When removed, it is very liable to ſuffer repeated returns during the puerperal ſtate.

L. The treatment conſiſts ſimply in promoting the acceſſion of the ſweating ſtage, on which its termination depends. This is to be done by ſome additional increaſe of heat during the cold fit, which is to be continued until the hot one commences: it may be then removed; and, on the appearance of the ſweat, this diſcharge is to be kept up for four or five hours, when the complaint will be removed. After its removal, the uſe of opiates will be proper to counteract that increaſed irritability of the ſyſtem which is its natural conſequence.

Lacteal, or Milk Fever.

LI. Next to the weed falls to be noticed the lacteal, or milk fever. It generally appears from the third to the ſixth day after delivery, the moſt critical period of child-bed; the breaſts ſwell, and become diſtended, and the effect of this is a general irritation of the ſyſtem, diſplayed in a reſtleſſneſs, ſtartings in ſleep, pain of the head, and ſhooting of the breaſts. The duration of

theſe ſymptoms is from twelve or twenty-four to forty-eight hours.

LII. The removal of theſe ſymptoms depends on the proper unloading of the breaſts, and that either by ſuction, or elſe preventing the determination to them.

LIII. Suction is of two kinds,—the wet and the dry.

The firſt conſiſts in the proper and timely application of the child, which ſhould be done early, or at leaſt ſo ſoon as a ſhooting or diſtenſion is felt, and endeavouring, till a proper quantity is removed, to relax the breaſt, by lubricating applications, as axunge, or cream rubbed upon it.

LIV. But when ſuckling is not intended on the part of the woman, the determination to the breaſt ſhould be prevented, by early enjoining an abſtemious regimen, eſpecially with regard to her drink, and keeping the body open by the uſe of mild laxatives; by this means the milk will ſoon be carried off, either by the inteſtines or ſkin. At times, however, from the violence of the local ſymptoms in the breaſt, it is found neceſſary to unload it, in order to procure a temporary relief; and this is done either by wet ſuction, by means of a child or a puppy, or elſe a grown perſon, who has been in the habit of it. But in general, in this caſe, dry ſuction is preferred, which conſiſts in the uſe of glaſſes and inſtruments of different kinds; but from the preſſure they produce on the breaſt, they are not ſo ſafe as the former method.

LV. Such is the common treatment of the milk

fever, when the local affection of the breaſt is ſoon relieved; but when the diſtenſion is ſo great as to excite inflammation, the latter frequently paſſes on to ſuppuration, the termination of which is various, and exhauſts the patient in a high degree. For a detail of this *vide* Volume Second, page 130.

LVI. The ſame morbid ſtate that thus affects the breaſts is found alſo to affect the nipple, and for an account of it the ſame reference may be made to Volume Second, page 262.

Miliary Fever.

LVII. After the lacteal, comes to be mentioned the miliary fever, which may be defined a fever attended with particular anxiety or dejection, and pain of breaſt, with a ſouriſh ſmell, and remarkable prickling of the ſkin, terminating at laſt in an eruption of red or white ſpots.

LVIII. This diſeaſe, though occaſionally ſymptomatic, and the effect of a warm regimen, is by no means always ſo. It clearly appeared epidemic in the tenth century, at Leipſic; and we may therefore infer, that a peculiar contagion, generated under certain circumſtances in child-bed, produces it.

LIX. Authors have, alſo, divided it into two ſpecies, the mild and the malignant; and to the laſt only does the ſpecific nature of the diſeaſe belong.

In the firſt kind, the pulſe continues generally ſtrong,

or partakes ſomething of an inflammatory nature. In the latter, the pulſe is quick and weak, reſembling the ſtate of typhus, and the eruption is preceded and attended by a putrid diarrhœa.

LX. The prognoſis in this fever is regulated by the appearance and number of the puſtles. In the mild ſpecies they are of a red colour, but in the malignant white. By the appearance of the former, a relief of the ſymptoms takes place; but in the latter, an increaſe of the diſeaſe follows the eruption, accompanied with a loſs of ſpeech and ſtupor, which often proves fatal in the ſpace of twelve or twenty-four hours.

LXI. In the treatment of this fever, a cool regimen is particularly indicated; and in the mild ſpecies little elſe is neceſſary to produce recovery: but in the malignant, the ſame plan muſt be purſued as directed for the treatment of typhus; for which *vide* Volume Firſt, page 301.

Puerperal Fever.

LXII. The laſt diſeaſe that claims our attention in child-bed is the puerperal fever, which may defined a fever whoſe acceſſion is very early after delivery, generally the ſecond or third day, attended with a quick irregular pulſe, remarkable proſtration of ſtrength, great affection of forehead, and general ſoreneſs and tenſion of the abdomen.

LXIII. The peculiar ſymptoms of the diſeaſe are—
1. The abdominal tenſion, pain, and ſoreneſs, which

riſe to the moſt exquiſite height, without, however, any hardneſs being felt, and frequently there is even no fullneſs.

2. The fœtid diſcharge of the lochia (or cleanſings).

3. Little or no delirium, but a conſtant watchfulneſs and dread of death; and,

4. A number of deceitful remiſſions, the firſt of which takes place in twenty-four hours after the attack, and theſe remiſſions always uſher in an aggravation of ſymptoms.

LXIV. The cauſe of this diſeaſe would ſeem to be a peculiar contagion, affecting the puerperal ſtate alone; for it has appeared at times epidemic, when no caſes of typhus has occurred at the ſame period. This contagion was not taken notice of till about 50 years ago; but ſince that time it has appeared epidemic in a number of places particularly at Paris in 1746 and 1762; in London in 1761 and 1772; in Edinburgh in 1773; and in Dublin in 1774 and 1787.

LXV. Though in general fatal, ſome inſtances of recovery take place, and that by a criſis on the eleventh day. The diſcharges attending the criſis are,—a ſweat, diarrhœa, and more rarely external abſceſſes of the abdomen.

LXVI. Our opinion here ſhould always prognoſticate, if not a fatal, at leaſt a doubtful event; and the more ſo, that the diſeaſe is liable to ſuch deluſive remiſſions. Even where the gangrenous ſtate of abdomen has taken place, an entire ceſſation of pain is apt to miſlead, though the feeble irregular pulſe, and pale dejected countenance, point out, inſtead of relief, the rapid approach of the fatal termination.

LXVII. The chief morbid appearances of this fever, diſtinct from thoſe of common putrid fever, are diſplayed in the abdomen. A diffuſed inflammation pervades the peritonæum, and the omentum is found entirely diſſolved, ſometimes gangrenous; collections of a ſerous and gelatinous fluid are alſo found within the abdomen, often to the extent of ſix or ſeven pounds, in which the uterus floats. The inteſtines are all highly inflamed, and the ſmall ones diſtended with wind. The uterus is of its proper ſize, and, when cut into, is without diſeaſe.

LXVIII. The abdominal affection then forms the peculiar characteriſtic of this fever, and the fatality of this affection we are to look for in the particular ſtate of the parts affected by child-birth.

LXIX. Theſe parts are the uterus and omentum; and from the effect of delivery, which conſiſts in the operation of a mechanical ſtimulus upon them, their ſtate muſt naturally be a tendency to inflammation. In the former, however, or the uterus, this is ſomewhat diminiſhed by the hæmorrhage unavoidably ſucceeding the expulſion of the child, and its continuance for ſome time after; but in the latter, or the omentum, from the want of activity in its veſſels, and the accumulation of their contents by the obſtruction of its circulation during the preſſure from gravidity, this ſtate continues the ſame; and when affected by the general irritation attending the operation of the febrile cauſe, an actual inflammation occurs, which gives a new acceſſion of violence, and adds the characteriſtic ſymptoms to the general diſeaſe.

LXX. This inflammation diffuſes itſelf quickly over the affected membrane, and various ſympathetic ſymptoms ariſe in the contiguous organs, and produce ſuch a violent irritation, as is incompatible with the continuance of life, even without any farther local derangement, or the progreſs of the inflammation, proceeding an effuſion of pus, from ſome part of the inflamed membrane, takes place into the abdominal cavity, when, in the ſame manner, a fatal termination enſues.

LXXI. From this cauſe, then, of a contagion, perhaps ſomewhat ſimilar to typhus, acting upon the ſyſtem, united with a peculiar local affection of a part, the theory of the diſeaſe may be deduced, and its general fatality accounted for. Both theſe circumſtances are confirmed by the diſſections of it detailed (LXVII.), and by its well-known contagious nature.

LXXII. The treatment of puerperal fever has been more varied than that of the two other ſpecies of putrid fever juſt deſcribed. From the appearances, on diſſection, denoting inflammation, an attempt has been made here to cure it by large and repeated bleedings on the firſt attack, in the ſame manner as in the preceding diſeaſe, and theſe have been ſaid to be ſucceſsful at times. Ipecacuanha has been alſo uſed as a ſpecific here. It is given in a doſe of 15 grains, exhibited at twice, with an interval of an hour an a half betwixt each. This medicine is attended both with vomiting and diarrhœa. It is repeated in the ſame manner the following day, if the ſymptoms do not remit, and even continued to the third or fourth. After procuring a favourable remiſſion in this way, wine is then to be thrown in, and ſym-

ptoms of irritation obviated by the uſe of opium. The treatment being, in other reſpects, conducted on the ſame plan with that of putrid fever; though a prejudice prevails here, with ſome, againſt the uſe of bark.

LXXIII. From the inveteracy of the infection of this diſeaſe, which has been found frequently to baffle every mode of rooting it out, for ſome time, by fumigation, ventilation, and even white waſhing of the infected place, every means of prevention ſhould be employed, and particularly the immediate removal of all puerperal women from its vicinity.

BOOK V.

PROGNOSTICS OF MIDWIFERY.

I. WE have thus considered the three classes of diseases peculiar to the pregnant, the parturient, and puerperal states, which form the subject of midwifery; but in the exercise of his profession an accoucheur is frequently called upon to decide certain questions in a summary way; viz. the existence of virginity, conception, the state of labour, and child-birth.

II. These points are chiefly ascertained either by an inspection of parts, or else by touching; and in detailing this operation, we shall connect, under one view, what has been delivered at large in the preceding work.

III. Touching is performed by the introduction of the fore finger, of either hand, which is generally preferred, into the vagina, the patient being previously placed in bed, on her left side, with her knees drawn up towards her breech, to facilitate its entrance. When introduced, it is to be directed first backwards and then upwards, towards the centre of the pelvis; by which the situation of the uterine orifice will come to be detected. Previous to the operation, the finger should be anointed with some unctuous substance, less to prevent

pain than to guard againſt the danger of infection when any accidental leſion may have taken place.

IV. The purpoſes of examination we have mentioned to be various. To aſcertain pregnancy in its early period is a matter of conſiderable difficulty, and on this account practitioners, when required, have generally declined giving their opinion for ſome time, till the augmentation of the uterus has rendered it in ſome meaſure undoubted. When, therefore, in the early months, we are compelled, from the anxiety of the patient, to give an opinion, every circumſtance that can favour the ſucceſs of the operation muſt be attended to.

V. The circumſtances that require attention for the ſucceſs of touching in the early months are,—

1. The poſture of the patient, which ſhould be upright, inſtead of lying on her ſide, as the uterine orifice is generally, during geſtation, beyond the reach of the finger.

2. A collapſed ſtate of the inteſtines, by which the uterine tumour, however ſmall, will come to be more diſtinctly felt; hence the morning has been preferred for this operation; and,

3. The additional application of the hand externally to the uterine region, which will detect the ſtate of the body of the uterus, and aſſiſt, by its preſſure, the orifice deſcending lower into the pelvis.

Hence, in any tumour of the abdomen, where the os uteri can be eaſily touched, if, on applying the hand externally, and moving, at the ſame time, the neck of the uterus with the finger within the vagina, the tumour does not ſeem affected with the motion of the neck,

there is in this caſe no pregnancy, but a morbid enlargement, not affecting the uterus.

VI. From the os tincæ then not being affected by early pregnancy, we judge chiefly at this period by the feel of the abdomen. In its natural ſtate the uterus is hardly felt through it; ſo, wherever it is diſtinct, and the os tincæ at the ſame time rather beyond reach, pregnancy may be ſuſpected.

VII. There are two circumſtances from which women themſelves, in the early months, judge of their pregnancy; the firſt is, the abſence of the menſes; and the other (a more certain one in women who have borne children) is ſome peculiar circumſtance, often an abdominal complaint, felt at a certain period, and which diſplays great regularity in its recurrence.

VIII. From the feel then of the uterine orifice alone, little information is to be drawn; for though a great regularity prevails in the enlargement of the higher parts, yet that of the neck is leſs to be depended upon in the exact progreſs of its diſtenſion: hence, though it has been mentioned by all authors, that, during pregnancy, the os uteri is more contracted than uſual, the neck ſhorter and thicker, and the orifice turned more towards the rectum; yet nothing varies ſo much as the natural ſhape and ſize of theſe parts; for in ſome the orifice is very cloſe, independent of pregnancy, while in others it retains always a patulous ſtate, and the length of the neck is always ſubject to the ſame variety.

IX. From theſe conſiderations, an opinion on the

exiſtence of pregnancy, from examination, ſhould generally be ſhifted by an accoucheur as long as poſſible; and, when under a neceſſity of giving it his judgment, ſhould be directed by a conjunction of circumſtances; as,—

1. The general habit of the patient, or the preſence of thoſe characteriſtic circumſtances which mark moſt ſtrongly the female conſtitution.
2. The former ſtate of uterine health.
3. The preſent morbid ſymptoms; and,
4. The examination itſelf.

X. Touching is employed in the latter end of pregnancy, for the purpoſe of aſcertaining,

1. Whether labour is commenced.
2. The ſtate of its preſentation; and,
3. The nature of the labour itſelf.

XI. The firſt of theſe is judged of from the os tincæ falling low into the pelvis, from the pains having a ſenſible effect towards its dilatation, and from the orifice having little or no prominence remaining; hence, wherever the os uteri is prominent, and at the ſame time cloſe ſhut, you may decide on the woman not being in labour, whatever degree of pain ſhe may ſuffer.

XII. The ſtate of preſentation is learnt from the manner in which the membranes form, and from the feel alſo of the preſenting part itſelf through them; for, as the uterine orifice dilates, the weight of the waters forces the membranes through it. When they appear in the regular form of an elaſtic round bag, it is a favourable ſign. When they want a good deal of their elaſticity, even in time of a pain, then the paſſage is

confined, and the presenting part does not allow their coming forward. When they appear long, soft, and, as it were, like a gut, it is a mark of an unfavourable presentation, the uniform pressure of the head being wanting to hinder the membranes from falling down more on one side than on the other. An opinion from the gathering of the waters can only be formed during the presence of pain; while the presentation again is chiefly to be judged of during its absence, or as the pressure of the water recedes, when nothing but the thin coat of the membranes is interposed. The head is generally discovered by its round form and hardness. If very minute in your examination, the fontanelle may even at times be felt.

Wherever there is a want of that resistance which the head always gives us, the presentation is then unfavourable, the rupture of the membranes should be watched with the greatest attention; and advantage immediately taken of that time to put matters in a proper train for delivery. Where, however, the breech presents before the rupture of the membranes, it is often a difficult matter to decide whether this part is not actually the head; but it is of little consequence, as, on the breaking of the membranes, the fact will be easily ascertained, when it is time enough to enter on the mode of delivering.

XIII. The last species of information derived from touching in labour, is the nature of the labour itself; and this is determined,

1. By the space of the bony cavity.

2. By the appearance of the os tincæ; and,

3. By the apparent resistance of the other soft parts.

Whenever the finger, introduced into the vagina, touches

with eaſe the ſacrum or coccyx, the pelvis is faulty in that direction. Where two fingers are not admitted eaſily under the pubes, a diſtortion of that part may be ſuſpected. Where the hand, introduced by the lateral part of the pelvis, is cramped in its paſſage, the general ſpace of the cavity is defective. The ſame may be learnt by the early over-lapping of the bones of the head on its preſenting in labour. Where the finger, brought round the head, having already entered the pelvis, feels a conſiderable ſpace on one ſide more than on the other, a projection of the ſacrum takes place: and where the head on the commencement of labour is too eaſily felt before entering the pelvis, a general ſhallowneſs of capacity is more or leſs indicated.

XIV. The appearance of the os tincæ again, as well as of the pelvis, is a circumſtance on which moſt practitioners of experience greatly rely. If ſituated towards the pubes, it is remarked, as the uterus is then more towards the external orifice, and has deſcended lower, the labour, where no morbid reſiſtance occurs, is more expeditious than when it originally preſents towards the ſacrum. If the uterine orifice is ſoft and dilatable, with its edges thin and flat, and the patient's pains ſeem to have much effect, a quick labour may be expected; while, on the contrary, if the orifice is with difficulty reached, if it feels dry and rigid, and thickens in its progreſs, forming into a tumid ring round the preſenting part, the reverſe may be expected. If the pains alſo continue for ſome time regular and ſtrong, and the orifice is ſtill hardly to be reached, an unfavourable preſentation may be looked for; the more extenſive preſſure from the incumbent parts drawing it from ſide to ſide, and the part itſelf not falling eaſily into

the cavity of the pelvis, like the head; the oſſification alſo of the head itſelf, when the membranes are ruptured, and it forms the preſenting part; enables us to judge ſomewhat of the nature of the labour.

XV. The laſt circumſtance enumerated, as directing our opinion in labour, is the ſtate of the ſoft parts themſelves; if the parts are dry and rigid, poſſeſſing little ſecretion of natural mucus, a tedious labour is then to be expected. If the parts, independent of the ſecretion, poſſeſs a good deal of elaſticity, as commonly happens in a firſt labour, the ſame inference may be drawn.

XVI. But, independent of pregnancy at all, it is by the touch alone a diſeaſed ſtate of the uterus can be determined, and proper means of relief applied in thoſe different organic affections to which it is ſubjected. Thus, where there prevails in a woman of advanced life a long continued flooding, or one frequently recurring with a degree of niſus, or occaſional down-bearing pain, though a polypus of the uterus may indeed be ſuſpected, it is only by the touch it can really be aſcertained. In the ſame way, when a woman at this period of life feels a weight in the uterine region, with occaſional lancelating pains, a ſchirrus may be ſuſpected; and when, on touching, the os uteri ſeems painful on preſſure, it is then beyond a doubt.

XVII. We have thus detailed the chief circumſtances which regulate our opinion on touching during pregnancy and labour. The diſeaſe for which pregnancy is moſt liable to be miſtaken is dropſy, eſpecially when encyſted. Dropſy of the uterus itſelf is a very rare complaint, and can only happen when ſome obſtruction,

from diſeaſe, occurs at the os tincæ: but even here it requires a particular ſtate of the organ in order to be induced; hence it is generally ſymptomatic of ſchirrus; and as this laſt affection is ſeldom confirmed till after the age of child-bearing, it can never almoſt, although alleged by authors, be miſtaken for pregnancy. Dropſy of the ovarium, however, is more common; and being generally long before it arrives at any conſiderable ſize, little pain is felt from it until this period.

It firſt begins with a dull pain on one ſide: to this is ſoon added a ſenſe of weight. Theſe ſymptoms continue to increaſe, when the thigh and leg of the ſame ſide come to be affected. As menſtruation becomes always in this caſe irregular, and as the ſubjects of the diſeaſe are frequently young, pregnancy becomes a natural ſuſpicion, and it is impoſſible for ſome time to know the difference; for the increaſed thirſt, and paucity of urine, is leſs common here than in the other ſpecies of dropſy. On this account our opinion muſt be ſuſpended, till, from the continuance of the ſymptoms beyond the proper period, it comes to be diſtinguiſhed as ariſing from a morbid cauſe.

XVIII. The laſt ſpecies of information which the profeſſion of the accoucheur is often called upon to decide, is whether at any former period pregnancy may have taken place, or even, independent of pregnancy, whether the female is ſtill in what may be termed the virgin ſtate.—Nothing is more fallacious than the pretended criterions of authors to aſcertain theſe points.—Where, however, an accoucheur is profeſſionally called upon, he is under the neceſſity of paſſing an opinion; and practitioners of experience, conſcious of its difficulty, have

inclined therefore always to the favourable ſide, that they may not, on any equivocal proof, include the innocent with the guilty, or by their deciſion condemn, where room only is afforded for ſuſpicion.

XIX. The ſigns of previous delivery enumerated by authors are chiefly drawn from the ſtate of the parts affected; they conſiſt of—

1. A ſlight ſwelling, or relaxation of the genital parts.
2. Conſiderable dilatation of the vagina.
3. The uterine orifice, ſoft and patulous, with its edges divided into flaps.
4. The appearance of cicatriſation over the external ſurface of the abdomen, and mammæ; and,
5. The length of perinæum.

Many others are mentioned, but theſe are chiefly to be depended upon; but at the ſame time the examination ſhould be made a few days after delivery; for theſe appearances become ſoon ſo indiſtinct, that they cannot be truſted to,—and it is only by their occurring all together, that our judgment can, with accuracy, be directed.

XX. Where, in other caſes, a woman has died under this ſuſpicion, and a greater length of time has elapſed than what the former ſymptoms are confined to, if diſſection is allowed, an infallible criterion is afforded, by examining the ſtate of the ovum, and aſcertaining the exiſtence of that cicatrix which is found to mark the ſituation of the corpus luteum.—This circumſtance it is now known, for certain, is never diſcovered in any but thoſe who have previouſly conceived. Hence no miſtake can ariſe in determining an opinion here.

XXI. The ſymptoms of virginity which have been ſo largely entered into by moſt writers are ſtill more fallacious than thoſe now detailed, as marking the previous exiſtence of pregnancy; they are chiefly drawn—

1. From the firmneſs of texture of the external parts,
2. From the exiſtence of the hymen; and,
3. From the diſcharge of blood on the firſt attack.

XXII. On theſe ſymptoms it may be remarked, that with regard to the mere tenſion and firmneſs of the parts this will be much influenced by the natural ſtate of conſtitution; for where the female is robuſt, even after violation, they will for ſome time retain their elaſticity, which we find even occaſionally the caſe in proſtitutes. Beſides, by the uſe of aſtringents, the natural tenſion of the parts, when loſt, may be regained, and that even to ſuch a degree, that a caſe is mentioned by SAVIARD, where the vagina of a girl was ſo contracted, as hardly to admit the ſize of a writing quill: this practice, however, is not ſo often to be met with in this country; but in ſome others it is frequently employed. The parts alſo, from uterine diſeaſes, where the health of the female ſuffers, frequently looſe their proper firmneſs and tenſion, without the ſmalleſt ſuſpicion of any violation of chaſtity.

XXIII. The ſecond ſymptom of virginity, or the exiſtence of the hymen, is no way to be truſted, when it is ſo readily ruptured by accidental circumſtances in infancy, that it ſeldom remains entire to the age of puberty. Beſides in different women its extent varies, and therefore it may exiſt without the huſband's detection, unleſs very attentive in his examination.

XXIII. The laſt ſymptom, or the flow of blood on the firſt attack, has been often ſpoken of; and though con-

ſidered even by the Jewiſh legiſlature as a proper teſt of this ſtate, it is equally fallacious with the former; for if the parts are, from morbid cauſes, in a relaxed ſtate, they will not give that reſiſtance which occaſions the flow; and even if menſtruation has happened immediately preceding coition, ſo that the veſſels are depleniſhed, no diſcharge will frequently enſue, though the parts retain their natural ſtate: nay, ſuch is the effect of diſeaſe upon the parts, that an artful woman may often impoſe upon the moſt experienced of the other ſex,—and for her own purpoſes feign to have ſuffered violation, which we ſhall find it difficult, from inſpection, to contradict. Hence, as Mr. Buffon juſtly obſerves, Virginity is more to be conſidered as a moral virtue, exiſting in the purity of the female mind; and thoſe ſuperſtitious ceremonies, formerly in uſe of aſcertaining it, are to be conſidered as the real ways of violating it; and that every ſituation that produces an internal bluſh, is a real proſtitution.

XXV. With a view to the preſervation of virginity, it is curious to remark the different cuſtoms that have been introduced into different countries.—Men, both in rude and poliſhed life, have been for the moſt part jealous of a prior poſſeſſion in this caſe.—Anatomiſts have favoured this jealouſy, by fixing certain criterions for detecting it. Hence the happineſs of ſociety has been often diſturbed, and ſuſpicions excited from a pretended knowledge on this ſubject, where there was properly no room for them. It is therefore of importance to inculcate the very ſlight dependence that is to be placed on any opinion of this kind. Whatever the debauchee may pretend, there are no unerring criterions to go by,—and at any time a woman of addreſs may deceive the moſt knowing of the other ſex, who truſt to the infallibility of ſuch appearances.

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			Tinct. Absinthii	ʒj. to ij.
Acetum Vini. Vinegar.			Sal Aceti.	
			Syrup Aceti.	ʒj.
			Serum Acet. ad libitum (ʒj. Acet. ad ℔j. Lact.)	
Acidum Vitriolicum. Vitriolic Acid.			Sp. Vitriol. tenuis. gt. x. to xx. *vel Acid. Vitriol. dilut.*	
			Sp. Vitriol. dulcis. *vel Sp. Ætheris Vitriol.*	ʒj.
			Sp. Æther. Vitr. gutt. xxx. *vel Æther Vitriolicus.*	
			Elix. Vitr. Acid. gutt. xxx. *vel Acid. Vitr. Aromat.*	
			Elix. Vitr. dulc. gutt. xxx. *vel Sp. Æth. Vitr. Arom.*	
Ærugo, vel Cuprum acido acetos. ros. Verdigrease.			Ung. ærugin.	
			Aqua Sappharina. *vel Aqua Ærug. ammon.*	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Aloe.		gr. iij. to ʒ ff.	Tinct. Saccra. *vel Vinum Aloeticum.*	ʒij. to ʒʃ.
			Pil. Aloetic. *vel Pil. Aloes cum Myrr.*	
Aloes.			Pil. Rufi	℈j. to ʒ ff.
			Elix. Proprietatis *vel Elix. Aloes cum Myrr.*	gutt. xv. to ʒi.
			Elix. Proprietatis Vitriolic. *vel Tinct. Aloes vitriol.*	gutt. xv. to ʒj.
Althea. Marshmallow.	Leaf and root.	℈j. to ʒ ff.	Decoct. Altheæ (ʒj. to ℔j.)	℔ij. in dies.
			Syrup. Altheæ	ʒj. sæpe.
Alumen.		gr. iv. to ℈j.	Pulv. styptic. *vel Pulv. Alum. comp.*	gr. x. to ℈j.
			Serum Alumin.	ʒiv. to ℔ij.
Alum.			Coag. Aluminos.	
			Aqua styptic.	
Amygdalæ amaræ. Bitter Almonds.	Kernel.	gr. iv. to ℈ ff.	Ol. Amygd. Amar.	
Amygdalæ dulces. Sweet Almonds.	Kernel.	ad libit.	Ol. Amygdal. Emulsio cois.	ʒj. to ʒij. ad libit.
Amylum. Starch.			Mucilago Amyli.	ʒj. sæpe.
Anethum. Dill.	Seed.	℈j. to ʒj.	Ol. Anethi.	gutt. iij.
			Aq. Anethi.	ʒij. to iv.
Ammoniacum. G. Ammoniac.		℈j. to ʒj.	Lac Ammon.	ʒj. sæpe.
			Empiast. Ammon.	
Auguſtura.	Bark.	℈j. to ʒj.	Decoct. Auguſt.	℔ij. in dies.
			Tinct. Auguſt.	ʒj.
Aniſum. Aniſe.	Seed.	gr. iv. to xv.	Ol. Aniſi.	gutt. iij.
			Aq. Aniſi.	ʒij. to iv

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
ntimonium, vel Antimon. Preparat.				
ntimony.		gr. v. to ʒj.	Sulph. Aurat. Ant. *vel Sulphur Antimonii præcipitatum.*	gr. iv. to xvi.
			Pulv. Antimon.	gr. iij. to vi.
			Calx nitrata Ant. *vel* Pulv. Jacob.	gr. v. to xii. ter in die
			Tartarus emeticus. *vel Antimon. tartarisat.*	gr. i. to vj.
			Vinum è Tartar Emetic. *vel Vin. Antimon. tartarisati.*	gutt. xv. to xxx.
			Vin. antimonial. *vel Vin. è Tartar Antim.*	gtt. v. to ʒß.
'rabicum.			Trochisci albi.	ad libit.
			Mucilago Gum, Arabic	ʒiv. ad ℔j.
ium Arabic.		ʒij.	Emulsio Arabic.	ad. libit.
rnica.	Herb, flowers, and root.		Decoct. Arnicæ. (ʒj. flor. ℔j.)	℔ in die.
			Extract Arnicæ,	ʒij. to iv. in dies.
Leopard's bane.		ʒj. to ʒj.		
rsenicum.			Solut. Arsenic.	
Arsenic.		gr. ⅛ to iij.	(gr. iv. to ℔j.)	a table spoonful.
sa fœtida.		gr. x. to ʒß.	Pil. Gum. *vel Pil. Asafœtidæ com.*	ʒj.
			Tinct. fœtida. *vel Tinct. Asafœtidæ.*	gtt. x. to ʒj.
urant. Hispalense.	Leaf, flower, juice of fruit, & outer rind.		Aq. Cort. Aurant.	ʒij. to iv.
			Syrup. Cort. Aur.	ʒj.
			Conserv. Aurant.	ad libit.
			Ol. Neroli.	
Seville Orange.		ad libit.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Avena. Oats.	Seed.		Decoct. Avenæ.	ad libit.
Balsamum Canadense. Canada Balsam.		gtt. xx. to xxx.		
Balsam Copaibæ. Capivi Balsam.		gtt. xx. to xxx.		
Balsam Peruvian. Balsam of Peru.		gtt. x. to xl.		
Balsam Toletan. Balsam of Tolu.		gr. v. to ℔j.	Tinct. Toletan. gtt. v. to xx Syrup Balsam. ℥j. to ij *vel Syrupus Tolctanus.*	
Barilla. (Impure Fossile Alkali.)			Soda purificata. ℈ss. to ℈j Sal Rupellensis. ℥ss. to ℥x *vel Soda tartarisata.* Sal Glauberi. ℥v. to ℥x *vel Soda vitriol ata.*	
Belladonna. Deadly Night-shade.	Leaves.	gr. j. to vj.	Infus. Belladon. (gr. j. to ℥j.) Extract. Bellad. gr. j. to iv	℥i
Benzoinum. Benjamin.		gr. iv. to xv.	Flor. Benzoin. gr. iv. to vj *vel Acidum Benzoicum.* Tinct. Benzoin. gtt. x. to xl. *vel Tinct. Benzo. comp.*	
Borax. Tincal.		gr. x. to ℈ij.	Sal sedativ. Hombergii.	gr. iij. to ℈j.
Calx viva. Quicklime.			Aqua Calcis. ℥iv. to ℔j Lixivium caustic. gt. xv. to xl *vel Aq. Lixiv. caustic.* Lix. caust. acer. mit.	
Camphora. Camphire.		gr. iij. to ℥ss.	Sp. vinos. camph. Emulsio camphor. Bals. Opodeldoch. *vel Linim. saponaceum.* Linim. volat. *vel Oleum Ammoniatum.* Aq. vitr. camp.	ad libit.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Canella alba. Wild Cinnamon.	Bark.	gr. iv. to vj.		
Cancer. Crab.			Oculi Cancrorum. Chelæ Cancror.	℈j. to ʒj. ℈j. to ʒj.
Cantharis.			Tinct. Canthar.	gtt. xx. to xxx.
			Emplast. Vesicator. *vel Emplast. Cantharid.*	
Spanish Fly.		gr. ff. to ij.	Ung. epispas. fort. *vel Ung. Pulv. Canthar.* mit. *vel Ung. Infus. Canthar.*	
Cardamom minus. Seed. Lesser Cardamom.		gr. iij. to ʒ ff.	Tinct. Cardom.	℈j. to ʒj.
Carduus benedict. Leaves. Holy Thistle.		gr. j. to ʒj.		
Carvi. Carraway.	Seeds.		Ol. Carvi. Aq. Carvi. Spirit. *vel Spiritus Carvi.*	gtt. iij. ʒij. to iv. ʒj.
Caryophylla arom. Clove.	Fruit.	gr. iij. to ʒ ff.	Ol. Cary.	gtt. iij.
Caryophylla rubra. Clove July flower.			Syr. Caryophyl.	ʒj.
Cascarilla.	Bark.	gr. iv. to xij.	Infus. Cascaril. (ʒj. to ℔j.)	ʒiij.
Cassia fistularis. Cassia of the Cane.	Fruit.	ʒij. to ʒi.	Elect Cassiæ.	ʒ ff. to ʒj.
Cassia lignea. Cassia Bark.	Bark & flowers.	℈j. to ij.	Aq. Cassiæ.	ʒij. to iv.
Castoreum. Castor.		gr. iv. to ℈j.	Tinct. Castor. Tinct. Cast. Comp.	ʒj.
Catechu.			Tinct. Japonic. *vel Tinct. è Catechu.*	ʒj. to ʒij.
			Conf. Japonic. *vel Electuar. Japon.*	gr. v. to ℈j.
Japan Earth.		℈j. to ʒ ff.	Infus. Japonic. *vel Infus. Catechu.*	ʒij. to iv.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Centaur minus.	Tops.			
Leſſer Centaury.		ʒ ſſ.		
Cera alba et flava.			Linim. ſimplex.	
White and Yellow			Ung. ſimplex.	
Wax.			Cerat. ſimplex.	
			Ung. Baſilicon.	
			vel Ung. Reſinoſum.	
			Emplaſt. cereum.	
			vel Emplaſt. ſimplex.	
Ceruſſa.			Sacchar. Saturni.	gr. ½ to j.
White Lead.			*vel Ceruſſa acetata.*	
			Ung. Saturni.	
			vel Ung. Ceruſſ. acetat.	
			Ung. album.	
			vel Ung. Ceruſſæ.	
			Tinct. antiphthiſ.	gtt. xv. to xxx.
			vel Tinct. Ceruſſ. acetat.	
Chamæmelum.	Single.		Extra Cham.	gr. vj. to ʒ ſſ.
Chamomile.	flower.	gr. v. to ℈j.	Decoct. cois.	ad libit.
			vel Decoct. Chamæmel.	
Cicuta.	Leaves,		Extr. Cicut.	gr. v. to ℈j.
Hemlock.	flower, and ſeed.	gr. vj. to cxxviii.		
Cineres clavellati.			Lixiv. purificat.	gr. iij. to v.
Pot or Pearl-aſh.			Tart. regenerat.	ʒj.
			vel Lixiva acetata.	
			Tart. vitriolat.	ʒj. to v.
			vel Lixiva vitriolata.	
			Tart. ſolubile.	ʒ ſſ. to ℥j.
			Lixiva tartariſata.	
Cinnamomum.	Bark.		Species aromat.	gr. v. to xv.
			vel Pulv. Aromaticus.	
			Conf. Cardiac.	℈j. to ij.
			vel Elect. Aromaticum.	
			Ol. Cinnam.	gutt. iij.
			Tinct. aromat.	ʒj. to ij.
			vel Tinct. Cinn. comp.	
Cinnamon.		gr. iij. to ʒ ſſ.	Tinct. Cinnam.	ʒj. to ij.
			Aq. Cinn.	℥ij. to iv.
			ſpirit.	ʒj.
			vel Spiritus Cinnamomi.	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Cochlearia. Scurvy Grass.	Leaves.	ʒss. to ij.	Succ. ad scorbut. *vel Succ. Cochlear. comp.*	ʒij. to vj.
Colchicum. Meadow Saffron.	Root.	gr. ij. to ʒj.	Syrup. Colchici.	ʒj. to ij. ter in dies.
Colocynthis. Bitter Apple.	Fruit.	gr. v. to ʒj.	Pil. Cocciæ. *vel Pil. Aloes cum Coloc.*	ʒj. to ij.
Columba. Columbo.	Root.	gr. x. to ʒj.	Tinct. Columbæ.	ʒss. to j.
Contrayerva. Counter-poison.	Root.	gr. vj. to ʒss.	Pulv. Con. com.	ʒj. to ʒj.
Coriandrum. Coriander.	Seed.	ʒss. to ʒj.		
Cornu Cervi. Hartshorn.		ʒss. to ʒj.	Sal. C. C. *vel Ammonia præparata.*	gr. iii. to xv.
			Sal. C. C. volat.	gr. vj. to ʒj.
			Ol. C. C. *vel Aq. Amm. ex Ossibus.*	gutt. x.
			Sp. C. C.	gutt. xv. to ʒj.
			Decoct. alb.	ʒiv. sæpe.
Cortex Peruvianus. Peruvian Bark.		ʒj. to ʒj.	Extr. C. P.	gr. v. to ʒj.
			Decoct. C. P. *vel Decoct. Cinchonæ.*	℔j. to ij. ind.
			Tinct. C. P. *vel. Tinct. Cinchonæ.*	ʒj.
Creta alba. Chalk.		ʒj. to ʒj.	Pulv. cretaceus.	ʒj. to ʒj.
			Potio cretacea.	ʒiv. sæpe.
			Trochisci Cretæ.	ad libit.
Crocus. Saffron.	Chives.	gr. v. to ʒj.	Tinct. Croci.	gutt. x. to ʒj.
Elaterium. Wild Cucumber.	Fruit.	gr. j. to iij.		
Cuprum vitriolatum. Blue Vitriol.		gr. ¼ to j.	Aq. styptic. *vel Aq. Cup. vitr. comp.*	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Digitalis. Fox-glove.	Plant.	gr.j. to viii.		
Ferrum. Iron.			Limatura.	gr. iv. to viij.
			Marsfaccharat.	gr. iv. to viij.
			Vitriol. calcinat.	gr. ſſ. to ij.
			vel Ferrum vitr. exſiccat.	
			Colcothar. vitriol.	gr. ſſ. to iij.
			vel ——— *uſtum.*	
			Flores martiales.	gr. vj. to ℈j.
			vel Ferrum ammoniatum.	
			Tinct. Martis.	gutt. x. to xx.
			Sal Chalybis, *vel* Vitriol. Martis.	gr. ij. to vj.
			vel Ferrum Vitriolatum.	
Fuligo Ligni. Woodſoot.			Tinct. Fulgin.	gutt. x. to ʒj.
Galbanum. Galban.		gr. x. to xv.		
Gallæ. Galls.		gr. ij. to vj.		
Gambogia. Gamboge.		gr. ij. to vj.		
Gentiana.	Root.		Extr. Gentian.	gr. v. to ℈ ſſ.
			Infuſ. amar.	ʒj. to ʒiv.
			vel Infuſ. Gentiani comp.	
Gentian.		℈j. to iij.	Vin. amar.	ʒj. to iij.
			vel Vin. Gentiani comp.	
			Elix. ſtomach.	ʒß.
			vel Tinct. amar. vel G. c.	
Glycirrhizza.	Root.		Extr. Glyc.	ad libit.
			Decoct. Glyc.	idem.
Liquorice.		ʒß. to ʒj.	(ʒj. to ℔ij.)	
			Trochiſci. Nigr.	idem.
			vel Trochiſci Glycirrh.	
Granata Malus. Pomegranate.	Flowers & rind of the fruit.	℈j. to ʒj.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Guajacum.	Wood, bark, & resin.		Gum Guiac.	℈ ff. to ʒ ff.
			Elix. Guiac.	gt. xx. to ʒ ff.
			vel Tinct. Guajaci.	
Guiac.		ʒ ff.	Elix. Guiac volat.	ʒ ff.
			vel Tinct. g. ammoniata.	
Hordeum.	Seed.		Decoct. Hordei.	ad libit.
Barley.				
Hydrargyrus.			Merc. calcinat.	gr. j. to iij.
			vel Hydrarg. calcinat.	
			Pil. Mercur.	gr. x. to xv.
			vel Pil. Hydrargyri.	
Mercury.		ʒ ff. to ij.	Pil. Æthiopicæ.	gr. x. to ℈ j.
			Æthiops mineral.	ʒ ij.
			vel Hydr. sulphur. niger.	
			Pil. Plummeri.	gr. x. to ℈ j.
			vel Pil. Calomelan. comp.	
			Ung. cœruleum.	
			vel Ex. Hydrarg.	
			Ung. Citrin.	
			vel Ung. Hydr. nitr.	
			Ung. Calc. Hydrar. alb.	
			Emplast. cœrul.	
			vel Empl. Hydr.	
			Mer. corros. subl.	gr. ff. to ij.
			vel Hydr. muriat. corros.	
			Mer. dulcis.	gr. j. to v.
			vel Calomelas.	
			Turpeth mineral.	gr. ff. to j.
			vel Hydr. vitriolat. flav.	
			Mer. cinereus.	gr. ij. to iv.
			vel. Hydr. præcip. ciner.	
			Mer. præc. rubr.	gr. j. to iij.
			vel. Hydr. nitrat. rubr.	
			Mer. præc. alb.	gr. ij. to iij.
			vel Calx. Hydrarg. alb.	
Hyoscíamus. Henbane.	Herb, & seeds.		Extr. Hys.	gr. j. to ℈ j.
Jalapium.	Root.		Pulv. Jalap. comp.	℈ j. to ʒ ff.
			Pil. è Jalap.	gr. x. to xv.
Jalap.		gr. x. to ℈ ij.	Resin Jalap.	℈ ff. to j.
			Tinct. Jalap.	ʒ ij. to vj.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Ipecacuhana.	Root.			
			Pulv. Dover.	gr. x. to ℈j.
			vel Pulv. Ipecac. comp.	
Ipecacuhan.		℈ ff. to j.	Tinct. Ipecac.	ʒj. to ij.
			vel vin. Ipecac.	
Juniperus.	Berry		Ol. Juniperi.	gutt. iij.
Juniper.	& top.	ʒij. Bacc.	Aq. Junip. comp.	ʒj.
			vel Sp. Juniper. comp.	
Kino.		gr. viij.	Tinct. Kino.	ʒ ff. to j.
Gum Kino.		to xij.		
Lapis calaminaris.			Cerat. Lap. cal.	
Calamy.				
Lavendula.	flower		Ol. Lavand.	gutt. v.
Lavender.	& tops.	℈j. to iij.	Sp. Lavand. gutt.	xxx. to ℈j.
			Sp. Lav. Comp.	idem.
Lichen Islandicus.			Mucilag. Lichen.	ad libit.
Iceland Liverwort.		℈j. to iij.		
Lignum Campachense.			Extr. L. C.	gr. v. to xv.
Logwood.		gr. x. to ℈j.	Decoct. L. C.	ʒiv. sæpe.
			(ʒiij. to ℔ij.	
Lilium album.	Root.		Mucilag. Rad.	ad libit.
White Lilly.		℈j. to ʒj.		
Limon.	Juice,		Succ. Limon.	ʒj. to ij.
	outer		Syrup. Limon.	ʒj.
Lemon.	rind, &c.		Aq. Limon.	ʒij. to iv.
Linum.			Infus. Lin.	ad libit.
			(ʒff. to ℔ff.)	
Lintseed.			Ol. Lini.	ʒj.
Litharyrus.			Acet. Lithargyr.	gr. x. to ʒj.
Litharge.			Aq. veg. mineral.	
Manna.			Serum Mannæ.	ad. libit.
Manna.		ʒij.		
Magnesia alba.				
Magnesia.		℈j. to ʒij.		
Melampodium.	Root.		Extr. Melam.	gr. v. to ℈ ff.
Black Hellebore.		gr. vi. to ʒ ff.	Tinct. Melamp.	ʒj. to iij.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Mentha Pipirit.	Leaves.		Ol. Menthæ.	gutt. iij.
			Aq. Menth.	℥ij. to iv.
eppermint.			ſpirit.	℥j.
			vel Sp. Menthæ.	
Mentha Sativa.			Infuſ. Callid. *vel* Thea.	
pearmint.			(℥j. to ℔j.)	ad ljbit.
Mezereon.			Decoct. Mez.	℔ij. indies
	gr. ſſ. to iij.		(℥j to ℔iij.)	
Moſchus.			Tinct. Moſchi.	gtt. xxx. to ℥j.
uſk.	gr. iij. to xij.			
Myrrha.			Tinct. Myrrhæ.	gtt. xv. to ℥j.
yrrh.	gr. iij. to xij.			
Nitrum.			Acid. nitroſ.	
				tenue. gtt. aliq.
itre.	gr. vi. to ℈j.		Trochiſci Nitri.	ad libit.
			Sp. Nitri dulcis.	℥ſſ. to j.
			vel Sp. Ætheris nitroſi.	
			Cauſtic. Lunar.	
			vel Argentum nitratum.	
			Sal Polychreſt.	℥ij. to ℥ſſ.
			vel Lixiva vitriol. ſulph.	
Nux Moſchata.			Aq. Nuc. ſpirit.	
vel Myriſtica.				
utmeg.	gr. xv. to ℥j.			℥j. to ℥j.
			vel Sp. Myriſticæ.	
Oleum expreſſa.				
xpreſſed Oils.	℥j.			
Opium.			Pil. pacific.	gr. x. to ℈j.
			vel Pil. Opii.	
	gr. j. to cxx.		L. Laudanum.	gt. xxx. to ℥j.
			vel. Tinct. Opii.	
			Elect. Thebaic.	℥ij. to ℥ſſ.
			vel Electuar. opiatum.	
			Elix. Paregoric.	℥j.
			vel Tinct. Opii ammon.	
			Trochiſci Bechici	3 *vel* 4 indies.
			vel Troch. Glycir. cum Op.	
			Balſam. Anodyn.	
			vel Linim. opiatum.	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Papaver. Poppy.	Head.		Syrup. Diacodion. *vel Syrup. papav. albi.*	℥j. to ℥j.
Pimenta. Jamaica Pepper.	Berry.	gr. ij. to iv.	Aq. Piment. ——— ſpirit. *vel Sp. Pimentæ.*	℥i. to iv. ℥j. to ℥j.
Quaſſia.	Wood, bark, & root.	gr. x. to ʒj.		
Quercus. Oak.	Bark.	ʒij. to ℥j.		
Quercus Marina, Sea Wreck.			Æthiops Vegetabilis.	℥j. to ℥ij.
Rheum. Rhubarb.	Root.	ʒj. to ℥j.	Pil. ſtomach. *vel Pil. Rhei comp.* Infuſ. Rhei. Tinct. Rhei. Vin. Rhei. dulc. ——— amar. Elix. Sacer. *vel Tinct. Rh. cum Aloe.*	ʒſſ. ℥ij. to iv. ℥ij. to ℥ſſ. ℥j. ℥j. ℥j.
Ricini Ol. Caſtor Oil.	Seed.	℥ij. to ʒſſ.		
Roſæ pallidæ. Pale Roſes.	Petal.		Aq. Roſar. Syrup. Roſar.	℥ij. to iv. ℥j.
Roſæ rubræ. Red Roſes.	Petal.	gr. v. to ʒſſ.	Conſerv. Roſar. Tinct. Roſar. *vel Infuſ. Roſar.* Syrup. Roſar.	ʒſſ. ℥j. ſæpe. ℥j.
Roſmarinus. Roſemary.	Top & flower.		Ol. Roſmar. Aq. Sp. Roſmar. *vel Sp. Roſmarin.* Aq. Regin. Hung. Acet. aromat.	gutt. iij ℥j. to ℥j idem ℥j. to ij
Rubia. Madder.	Root.	ʒſſ. to j.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Ruta.	Herb.		Ol. Rutæ.	gutt. iij.
Rue.		℈ ss. to ʒj.	Infus. Rutæ. (ʒj. to ℔j.)	ʒij.
Sabina.	Leaf.		Extr. Sab.	gr. v. to ℈ ss.
Savine.		ʒ ss. to j.	Decoct. Sabin. (ʒj. to ℔iij.)	ʒij. to iv.
Sal Ammoniacum.			Sal Ammon. vol. gr. v. to ℈j. *vel Ammon. præparata.*	
Ammoniac Salt.		ʒ ss. to j.	Sp. Sal Am. *vel Aq. Ammoniæ.*	gtt. xv. to ʒj.
			Sp. Sal Am. cum Calce. *vel Aq. Am. Caustic.*	
			Sp. Sal Am. vin. *vel Sp. Ammoniæ*	gtt. x. to ʒj.
			Sp. Salin. arom. *vel. Sp. Am. aromat.*	gtt. x. to xl.
			Sp. volat. fœtid. *vel Sp. Am. fœtid.*	gtt. x. to xxx.
			Sp. Mindereri. *vel Aq. Am. acetat.*	ʒij. to ʒj.
Sal marin. Hisp.			Sp. Sal marin. *vel Soda muriata.*	gutt. v.
Sea Salt.		ʒj.		
Sal cathart. amar. vel Magnesia vitriolata.				
Bitter Cathartic Salt.		ʒij. to ʒ ss.		
Sapo alb. Hispan.			Pil. Sapo.	gr. v. to ℈j.
Castile Soap.		℈j. to ʒij.	Linim. saponac.	
Sarsaparilla.	Root.	ʒj. to ʒ ss.	Decoct. Sarsæ. (ʒj. to ℔j.)	℔ij. indies.
Sassafras.	Wood, root, & bark.	ʒij.	Decoct. Lignor.	idem.
Scammonium.			Pulv. Scam. c.	℈j. to ij.
Scammony.		gr. iij. to xij.		
Scilla.	Root.		Pulv. Siccat.	gr. i. to iij.
			Pil. Scillit.	gr. xv.
Squill.		gr. ij. to vi.	Acet. Scillit.	ʒj. to ʒ ss.
			Oxymel Scillit.	ʒ ss. to ʒ iij.
			Syrup. Scillit.	ʒj. to ʒ ij.
			Vin. Scillit. (rad. ʒ ss. ad. vin. ℔ij.) ʒ ss. pro dose.	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Scordium. Water Germander.		gr. v. to ℈j.		
Seneka. Senega.	Root.	℈j. to iij.	Decoct. Senekæ. (℥j. to ℔j.)	ʒij. to iv.
Senna.	Leaf.	ʒj. to ℥ss.	Elect. Lenitiv. *vel Electuar Sennæ.*	ʒij. to ℥ss.
			Elix. salut. *vel Tinct. Sennæ comp.*	℥ij.
Serpentaria. Snake-root.	Root.	ʒj. to ℈ss.	Decoct. Serpent. (rad. ʒij. to ℥vi.)	℥j. sæpe.
			Tinct. Serpent.	ʒss. to ij.
Spermaceti, vel Sevum Ceti.		℈j. to ʒj.		
Sinapi album. White Mustard.	Seeds.	℥j.		
Spongia. Sponge.			Spongia usta.	℈j. to ℥j.
Stanum. Tin.	Filings and powder.	℥ss. to ʒj.		
Succinum. Amber.		gr. viij. to ʒss.	Ol. Succini.	gtt. x. to xxv.
			Sal Succini.	gr. iv. to ℈j.
Sulphuris Flores. Flowers of Sulphur.		ʒij. to ℥ss.	Ung. antipsoric. *vel Ung. Sulphuris.*	
			Balsam sulph.	gtt. xv. to xxx.
Tamarindus. Tamarind.	Fruit.	℥ij.	Infus. cum Senna.	℥ij. to iv.
Tartari Chrystalli. Chrystals of Tartar.		ʒv. to vi.	Sal Tartar.	gr. iij. to xv.
			Lixiv. Tartar.	gtt. xv. to ʒj.
Terebinthina Veneta. Venice Turpentine.		℈ss. to ʒss.	Ol. Terebinth.	gutt. v.
			Sp. Terebinth.	gtt. x. to xx.
Tutia. Tutty.				
Valeriana sylvest. Wild Valerian.	Root.	℈ss. to ʒss.	Infus. Valerian. (℥j. to ℔j.)	ad libit.
			Tinct. Val. volat. *vel Tinct. Valer. Am.*	gtt. xx. to xl.
Veratrum. White Hellebore.	Root.	gr. v. to ʒss.	Tinct. Veratri.	ʒss.
			Decoct. Verat. (℥j. ad ℔j.)	℥j. sæpe.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Viola.	Fresh.		Infus. Violar.	℥ij. to viij.
Violet.	flower.		(℥j. to ℔j.)	
			Syrup. Violar.	℥j.
Ulmus.	Inner		Decoct. Ulmi.	℔ij. indies.
Elm.	bark.		(℥ij. to ℔ij.)	
Uva Ursi.	Leaf.		Infus. Uvæ Ursi.	℥j. to viij.
Bear's Wortleberry.		℈j. to ʒiij.	(ʒij. to ℔j.)	
Zincum.			Ung. Zinci.	
			Flor. Zinci.	gr. ij. to ℈jss.
			vel Zincum ustum.	
Zinc.			Aq. vitriolica.	
			vel Aq. Zinci. vitriolat.	
			Vitriolum album.	℈jss. to ij.
			vel Zinc. vitriolat.	
Zinziber.	Root.		Infus. Zinziber.	℥ij. to iv.
Ginger.		gr. v. to x.	(ʒij. to ℔j.)	
			Syrup. Zinziber.	℥j.

TABLE

Shewing the Quantity *of the* Principal *or Active* INGREDIENT *in certain* COMPOUND MEDICINES.

OPIUM.

	now	*contains*
L. Laud.	(*Tinct. Opii.*)	in each ounce ℈ij. of Opium.
Paregor. Elix.	(*Tinct. Opii am.*)	ditto gr. viii. of Opium.
Dover's Powd.	(*Pulv. Ipec. comp.*)	Dram gr. vj. of Opium.
Thebaic Elect.	(*Elect. Opiat.*)	ditto gr. j. of Opium.
Japon. Elect.	(*Elect. Catech.*)	Ounce gr. ij. ff. of Opium.
Pacific Pills.	(*Pil. Opii.*)	Dram gr. vj. of Opium.
Opium Troch.	(*Troch. Glyc. cum Op.*)	ditto gr. j. of Opium.
Anod. Balsam.	(*Linim. Opiat.*)	Ounce ℈j. of Opium.

MERCURY.

	now	*contains*
Pil. Merc.	(*Pil. Hydrar.*)	in each Dram gr. iv. of ☿.
Pil. Plum.	(*Pil. Calom. comp.*)	ditto gr. xxii. of ☿.
Ung. Merc.	(*Ung. Hydrar.*)	ditto gr. xij. of ☿.
Ung. nitrat.	(*Ung. Citrin.*)	ditto gr. iv. of ☿. and gr. vii. of acid.
Ung. nitrat. mit.	(*Ung. citr. mit.*)	ditto gr. ij. of ☿. and gr. iv. of acid.
Emplast. Merc.	(*Emp. Hydrar.*)	ditto gr. xvi. of ☿.

ANTIMONY.

	now	*contains*
Tartar emetic Wine.	(*Vin. Antimon. Tart.*)	in each Ounce gr. ij. of Tartar.

SCAMMONY.

	contains
Comp. Powder of Scammony. (*Pulv. Scam. comp.*)	in each gr. vij. gr. iv. of Scam.

ALOES.

	now	*contains*
Colocynth Pills.	(*Pil. Aloes cum Colocynth.*)	in each Dram gr. xvj. of Aloes.

JALAP.

	now	*contains*
Comp. Powder of Jalap.	(*Pulv. Jalap comp.*)	in each Dram ℈j. of Jalap.

PART II.

CLASSIFICATION

OF THE

PRINCIPAL ARTICLES OF THE MATERIA-MEDICA,

(ENUMERATED IN PART FIRST.)

ACCORDING TO THEIR MEDICAL QUALITIES.

CLASS I.

EMETICS.	EMETICA.
Bitters in an increaſed doſe	*Amara fortia*
Chamomile, Carduus, &c.	
Ipecacuhan	*Ipecacuhan*
Wine of ditto	*Vin. ejuſdem*
Antimonial Wine	*Vinum antimoniale*
Tartar emetic	*Tartarus emeticus*
Wine of ditto	*Vin. e Tart. emetic.*

CLASS II.

PECTORALS.	PECTORALIA.
I. ATTENUANTS, *as*,	I. ATTENUANTA, *ut*,
Squills (freſh and dried)	*Scilla*
Vinegar of ditto	*Acetum ſcilliticum*
Oxymel of ditto	*Oxymel ſcilliticum*

Syrup of ditto	*Syrup. ſcilliticus*
Pills of ditto	*Pill. ſcillit.*
Decoction of Liquorice	*Infuſ. Glycirrhizæ*
Extract of Liquorice	*Extr. ejuſdem*
Benjamin	*Benzonium*
Flowers of ditto	*Flores Benzoini*
Tincture of ditto	*Tinct. ejuſdem*
Gum Ammoniac	*Ammoniacum Gum*
Flowers of Sulphur	*Flores Sulphuris*
Balſam of ditto	*Balſam ejuſdem.*

2. INCRASSANTS, *as,*	2. INCRASSANTIA.
Marſhmallow	*Althæa*
Decoction of ditto	*Decoct. ejuſdem*
Syrup of ditto	*Syrup ejuſdem*
Gum Arabic	*G. Arabicum*
Mucilage of ditto	*Mucilago ejuſdem*
Emulſion of ditto	*Emulſio ejuſdem*
Arabic Troches	*Trochiſci Arabici*
Linſeed Tea	*Infuſ. Sem. Lini.*
Spermaceti	*Spermaceti vel ſevum ceti*
Expreſt Oils, as,	*Olea expreſſa, ut,*
Oil of Sweet Almonds	*Ol. Amygdal. dulcium*
Opium	*Opium,*

CLASS III.

CATHARTICS.	CATHARTICA.
1. LAXATIVES.	1. LAXANTIA.
Acid Fruits, *as,*	*Fructus acidi,* ut,
Tamarinds	*Tamarandi*
Caſſia of the Cane	*Caſſia Fiſtularis*
Electuary of ditto	*Elect. Diacaſia*
Manna	*Manna*
Manna Whey	*Serum Mannæ*
Syrup of Pale Roſes	*Syrup. Roſar. Damaſcenſ.*
Ditto of Violets	*Syrup Violarum*
Soaps	*Sapo*

Soap Pills	*Pil. Saponac.*
Cream of Tartar	*Crem. Tartari*
Magnesia	*Magnesia alba*
Castor Oil	*Ol. Ricini*
Flowers of Sulphur	*Flores Sulphuris.*

2. PURGATIVES, *as,*	2. PURGANTIA, *ut,*
Aloes	*Aloe*
Aloetic Pills	*Pil. aloetic vel ex Aloe*
Rufus' Pills	*Pil. Rufi vel Aloes cum Myrrha*
Aloetic Wine	*Vin. aloetic*
Rhubarb	*Rhæum*
Stomachic Pills	*Pil. stomachic.*
Tincture of Rhubarb	*Tinct. Rhæi*
Infusion of ditto	*Infusio ejusdem*
Wine of ditto	*Vin. ejusdem*
Bitter Tincture of ditto	*Tinct. Rhæi amar. vel T. Rhubarb. C.*
Sweet Tincture of ditto	*Tinct. Rhæi dulcis*
Sacred Elixir	*Elixir sacrum vel ex Aloet. Rheo*
Senna	*Senna*
Infusion of Tamarinds with Senna	*Infus. Tamarind. cum Senna*
Lenitive Electuary	*Electuar lenitiv. vel è Senna.*
Elixir of Health	*Elix. salut. vel Tinct. Senna C.*
Jalap	*Jalapium*
Extract of ditto	*Extr. ejusdem*
Compound powder of ditto	*Pulv. ejusdem comp.*
Jalap Pills	*Pil. è Jalap.*
Tincture of Jalap	*Tinct. Jalap.*
Syrup of Buckthorn	*Syrup. de Rhamno*
Bitter Cathartic Salt	*Sal Cathart. amar.*
Glauber's Salt	*Sal Glauberi vel Soda Vitriol.*
Solubile Tartar	*Tartar solubile vel Kali Tartarisat.*
Vitriolated Tartar	*Tartar vitriolatum vel Kali Vitriolat.*
Polychrest Salt	*Sal Polychrest. Idem*
Rochelle Salt	*Sal Rochelle vel Soda Tartaris.*

CLASS IV.

EMMAGOGUES.	MENAGOGA.
Rue and other Fœtids, whether Bitters or Gums,	*Ruta et alia Fœtida, ſive Amara ſive Gumm.*
Savine	*Sabina*
Decoction of ditto	*Decoct. ejuſdem*
Madder	*Rubia*
Infuſion of ditto	*Infuſ. ejuſdem*
Opium	*Opium*
Caſtor	*Caſtoreum*
Tinctures of ditto, ſimple and compound	*Tinct. Caſtor, ſimplex et compoſita*
Mercury	*Hydrargyrus*
Iron	*Ferrum*
Medicines that act by irritation on contiguous parts	*Medicinæ partes vicinas irritantes.*

CLASS V.

ABSORBENTS.	ABSORBENTIA.
Crab's Eyes	*Oculi Cancrorum*
Crab's Claws	*Chelæ eorundem*
Prepared Chalk	*Creta præparata*
Coral	*Corrallium*
Pearls	*Margaritæ*
Magneſia	*Magneſia*
Calcined Hartſhorn	*Cornu Cervi calcinat.*
Quick lime	*Calx viva*
All Alkalis in a diluted ſtate	*Alkalina mitia.*

CLASS VI.

DIURETICS.	DIURETICA.
Juniper	*Juniperus*
Oil of ditto	*Ol. ejuſdem*

Spirit of ditto	*Aq. compoſita ejuſdem*
Seneka	*Seneka*
Decoction of ditto	*Decoct. ejuſdem*
Nitre	*Nitrum vel Kali Nitrat.*
Salt of Tartar	*Sal Tartar. vel Aq. Kali*
Cream of ditto	*Cremor Tartar.*
Ammoniac Salt	*Sal Ammoniac.*
Syrup of Meadow Saffron	*Colchic. Syrup.*
Acids	*Acida*
Opium	*Opium.*

CLASS VII.

DIAPHORETICS.	DIAPHORETICA.
Counter-poiſon	*Contrayerva*
Compound Powd. of ditto	*Pulv. contrayer. comp.*
Guiac	*Guiacum*
Decoction of the Woods	*Decoct. Lignor*
Sarſaparilla	*Sarſaparilla*
Decoction of ditto	*Decoct. ejuſdem*
Antimony	*Antimonium.*

CLASS VIII.

SUDORIFICS.	SUDORIFICA.
Opium	*Opium*
Camphire	*Camphora*
Vinegar	*Acetum*
Volatile Alkali	*Alkali volatile*
Muſk	*Moſchus*
Snake root	*Serpentaria*
Tincture of ditto	*Tinct. ejuſdem*
Neutral Salts, *as*,	*Salesmedii*, ut,
Mindererus Spirit, &c.	*Sp. Mindereri, vel Aq. Ammon. Acetat. &c.*

CLASS IX.

CORROBORANTS. ROBORANTIA.

1. ASTRINGENTS, *as,* — 1. ASTRINGENTIA, ut,

Red Roſes	*Roſæ rubræ*
Oak Bark	*Cort. Querci*
Logwood	*Lignum Campechenſe*
Galls	*Gallæ*
Japan Earth	*Catechu*
Gum Kino	*Gum Kino*
Alum	*Alumen*
Armenian and other Bolar Earths	*Bolus Armena, &c.*
Peparations of Iron	*Ferri præparat.*
Ditto of Copper	*Cupri eædem*
Ditto of Lead	*Saturni eædem*
Ditto of Zinc	*Zinci eædem.*

2. TONICS, *as,* — 2. TONICA, ut,

Gentian	*Gentiana*
Leſſer Centaury	*Centaurium minus*
Quaſſy	*Quaſſia*
Simarouba	*Simarouba*
Decoction of ditto	*Decoct. ejuſdem*
Chamomile	*Chamæmelum*
Wormwood	*Abſinthium*
Tincture of ditto	*Tinct. ejuſdem*
Leopard's Bane	*Arnica*
Decoction of ditto	*Decoct. ejuſdem*
Peruvian Bark	*Cortex Peruvianus*
Anguſtura Bark	——— *Anguſtur.*

CLASS X.

STIMULANTS.	STIMULANTIA.
1. AROMATICS, *as*,	1. AROMATICA, ut,
Peppermint	*Mentha Piperitidis*
Spearmint	——— *Sativa*
Lavender	*Lavendula*
Leſſer Cardamon	*Cardamon. minus*
Roſemary	*Roſmarinus*
Cinnamon	*Cinnamomum*
Caſſia	*Caſſia*
Canella alba	*Canella alba*
Caſcarilla	*Caſcarilla*
Wild Valerian	*Valeriana ſylveſtris*
Orange Bark	*Cortex aurant.*
Sweet ſcented Flag	*Acorus.*
2. PUNGENTS, *as*,	1. PUNGENTIA, ut,
Muſtard	*Sinopi*
Nutmeg	*Myriſtica*
Clove	*Caryophylla aromatica*
Mace	*Macis*
Ginger	*Zinziber*
Alcohol	*Alcohol.*
3. BALSAMICS, *as*,	3. BALSAMICA, ut,
Turpentines	*Terebinthinæ*
Canada Balſam	*Balſam Canadenſ.*
Capivi Balſam	——— *Copaibæ*
Peruvian ditto	——— *Peruvian.*
Balſam of Tolu	——— *Toletan.*
Myrrh	*Myrrha*
Storax	*Storax*
Tar	*Petreolum.*

CLASS XI.

DEOBSTRUENTS.	DEOBSTRUENTIA.
Borax	*Borax*
Madder	*Rubia*
Soap	*Sapo*
Mercury	*Mercurius vel Hydrar.*
Mezereon	*Mezereon*
Antimony	*Antimonium.*

CLASS XII.

SEDATIVES.	SEDANTIA.
Acids	*Acida*
Nitre	*Nitrum vel Kali Nitrat.*
Opium	*Opium*
Hemlock	*Cicuta*
Deadly Night-ſhade	*Belladonna*
Henbane	*Hyoſciamus*
Camphire	*Camphora.*

CLASS XIII.

ANTISPASMODICS.	ANTISPASMODICA.
Amber	*Succinum*
Aſa fœtida	*Aſa fœtida*
Galbanum	*Galbanum*
Woodſoot	*Fuligo*
Æther	*Æther*
Caſtor	*Caſtoreum*
Muſk	*Moſchus*
Volatile alkaline Salts	*Sal. alkalina volatil.*

CLASS XIV.

CARMINATIVES.	CARMINATIVA.
Coriander	*Coriandrum*
Dill	*Anethum*
Sweet Fennel	*Fœniculum dulce*
Caraway	*Carvi*
Anise	*Aniſum*
Leſſer Cardamom	*Cardamomum minus.*

CLASS XV.

EMOLLIENTS.	EMOLLIENTIA.
Althea	*Althea*
Lintſeed	*Lini ſem.*
White Lily	*Lilium album*
Expreſt Oils	*Olea expreſſa*
Gum Arabic	*Gum. Arabicum*
Gum Tragacanth	—— *Tragacanth.*
Starch	*Amylum*
Spermaceti	*Spermaceti*
Axunge	*Axungia vel adep. ſuilla.*

CLASS XVI.

LITHONTHRIPTICS.	LITHONTRIPTICA.
Alkali, both mild and cauſtic	*Alkali cauſtic. et mite, vel Aqua Kali pur. et Aq. Kali*
Soap	*Sapo*
Lime-water	*Aqua Calcis*
Alkaline aërated Water	*Aqua alkalin. aërat.*
Wild Carrot	*Daucus ſylveſtris*
Bear's Wortleberry	*Uva Urſi*
Diuretics	*Diuretica.*

CLASS XVII.

REPELLENTS.	REPELLENTIA.
1. DISCUTIENTS, *as,*	1. DISCUTIENTIA, ut,
Calamy	*Lapis Calaminaris*
Zinc	*Zincum*
Tutty	*Tutia*
Lead	*Saturnum*
Mindererus Spirit	*Sp. Mindereri vèl Aq. Ammon Acetat.*
Vinegar	*Acetum.*
2. COSMETICS, *as,*	COSMETICA, ut,
Balsam of Mecca	*Balsam Meccæ*
Issues	*Fonticuli.*

EXTEMPORANEOUS PRESCRIPTION;

OR,

THE PRINCIPAL FORMS

EMPLOYED IN

THE CURE OF THE PRECEDING DISEASES.

INTRODUCTION.

Conception favoured by attention to the ſtate of conſtitution, by the regulation of the menſtrual diſcharge, and by the circumſtances taking place in the act of coition, detailed in p. 38 (1 and 2).

When relaxation of the conſtitution prevails to a morbid degree, *tonics* particularly indicated, as in vol I. p. 312. Where, on the contrary, rigidity prevails, this is to be obviated by change of climate, the uſe of the warm bath, &c. The regulation of the menſtrual diſcharge is much connected with the ſtate of conſtitution. Where relaxation however prevails, one ſymptom often occurs highly unfavourable to conception, this is the *fluor albus*, or *whites*, and it is to be removed by the means pointed out in vol. I. p. 297; and particularly by cold bathing.

BOOK I.

PREGNANCY.

Sympathetic Diſeaſes.

Dyſpepſia.

Firſt ſtage treated by blood-letting, where evidently plethoric The uſe of opiates, as in vol. I. p. 282. Or its injection; as,

℞ Infuſ. Lini ℥viij.
L. L. gutt. lx. m. ft. Enncma.

℞ Ol. Olivæ ℥v.
Tinct. Opii gutt. lx. m. fiat. Ennema.

Or by an external application; as,

℞ Emplast. Laddani ℥j.
G. Opii pulverisat. ʒj.
Liquef. Emplast. dein adde Opii Pulv.

Second stage obviated by the common dyspeptic remedies, and neutral salts in the act of effervescence; as,

℞ Sal Tartar ʒj.
Aq. font. ℥viij. M.
℞ Spt. Vitriol. ten.
Aq. font. ℥viij. M.

A table-spoonful of each mixture to be mixt, and taken in the act of effervescence.

Bitters, as in vol. I. p. 311 and 312.
Absorbents; as,

℞ Magnes. alb. ʒiij.
Pulv. Rhæi ℈ij.
Aq. Cinnam. ℥v.
Aq. font. ℥j. M. ft. M.

Two table-spoonfulls, a dose occasionally.

The heart-burn tablet, the best remedy being a mixture of absorbents and aromatics, as prepared and sold by LORT, apothecary in Edinburgh.

Malacia, or Longing,

Being an affection of mind, is to be treated by change of scene and amusement, so as to withdraw the mind from its attention to the particular infixt object which forms the disease.

Cardialgia, or Heartburn.

Palliated by the free use of absorbents, as in dyspepsia.

Hysteria.

Removed by the antispasmodics enumerated vol. I. p. 304.

Plethoric Diſeaſes.

Counteracting general ſtate at this period, either by veneſec-
on, if plethora ſtrongly marked; or, what is now more com-
on, by attention to the ſtate of the primæ viæ.

Affection of Breaſts.

Local applications conſiſt in allowing a freedom of expanſion;
d for that purpoſe employing warmth and emollients to admit
laxation.

℞ Ol. Palmæ ℥ij. *A little to be rubbed warm on the part, and the breaſt afterwards covered with fur or flannel.*

Retroverted Uterus.

The cure to be attempted.

1. By removal of preſſure on the organ, by the uſe of the ca-
eter, and clearing the inteſtines by injection.

In introducing the catheter here, its concave part muſt be turn-
d downwards, the reverſe of what is uſual in other caſes; and
the female one is too ſhort, the male one is to be preferred:
ne point of its curve in the introduction being alſo directed
ownwards.

2. Subduing inflammation and pain, by veneſection, if neceſ-
ary, fomentations and opiates; and,

3. Replacing the retroverted part, and retaining it in this
tate.

By a proper poſition of the patient for the operation; and
hen the latter is performed, enjoining reſt, and a horizontal poſ-
ure, till the retrovertive period is over, or till the end of the
ifth month.

In its ultimate ſtate, both premature delivery and SIGAULT's
peration equally ineffectual.

For a view of the diſeaſe, vide HUNTER's elegant plate.

Pleuriſy, Cramp, &c.

Treated by veneſection where indicated, the removal of ac-
cumulation in the inteſtines by laxatives, as in vol. I. p. 276,
ſucceeded by the uſe of anodyne injections, as in p. 327, along
with reſt.

Convulsions.

Treated by removal of uterine irritation by venesection, and clearing the intestines, by sedatives applied to the part, or opiate injections; and,

By a counter stimulus applied to restore the energy of the brain; as, dashing the face with cold water, &c.

Palsy.

As arising chiefly from pressure, to be palliated till delivery less by general means than by rest, and the topical application detailed in vol. I. p. 289.

MIXT DISEASES.

Obstipatio, or Costiveness.

To be avoided by a diet of easy assimilation, and the occasional use of laxatives, as in vol. I. p. 276.

Hæmorrhois, or Piles.

Treated by the use of laxatives, as in the former disease, and a horizontal posture, while pain is alleviated by opiates, as in vol. I. p. 282. And inflammation abated by external sedative applications, as in vol. II. p. 448.

Œdema, or Swelling of Legs.

Palliated till delivery by venesection, the use of laxatives, and a horizontal posture.

Varix.

Palliated in the same way; but if a rupture takes place astringent applications are to be then applied, as in vol. II. p. 41

Cramps of the Thighs and Legs.

Palliated, when severe, by opiates, as in vol. I. p. 282.

Cough and Dyſpnœa.

Palliated by veneſection, an occaſional opiate, and attention to erect poſture.

Vomiting.

Relieved by attention to diet, or ſmall quantities of light food time, and a particularly abſtemious regimen. Sometimes anging poſition of the uterus may be attempted.

Incontinence and Suppreſſion of Urine.

The former relieved by the proper application of compreſſes to ceive the diſcharge; the latter removed by the regular and mely uſe of the catheter.

Accidental Diſeaſes.

Dropſy.

Ascites admits the operation of tapping being performed dur- g pregnancy, if ſymptoms urgent, the puncture being made on he oppoſite ſide to that to which the uterus inclines. When no rgent ſymptoms occur, diuretics to be uſed till after delivery, as in ol. I p. 352.

Fluor Albus

Is during pregnancy a local affection, and is to be treated leſs by general remedies than local applications, as in vol. I. p. 297.

Rupture.

To be chiefly palliated by attention to the inteſtines; but where alarming ſymptoms occur, premature delivery to be attempted.

Calculus.

To be palliated where occurring by anodynes, till after delivery.

Nephritic Complaints.

To be treated in the ſame way by anodynes and demulcents, vol. I. p. 254.

Icterus (Jaundice).

To be palliated till delivery by laxatives, and the remedies recommended in vol. I. p. 335.

Venereal Diſeaſe.

To be removed by a gentle courſe of mercury, exhibited in the mildeſt form, as in vol. I. p. 328.

BOOK II.

ABORTION.

Management to prevent it conſiſts in,

1. Subduing the increaſed action of the uterus; by,
   Poſture, as directed p. 87.
   Opiate glyſters.
2. Leſſening determination to the organ; by,
   Bloodletting.
   Cold.

Weakening the action of contiguous parts; viz. of abdominal muſcles; by cold applications, as cloths dipt in oxycrate, and by their relaxation by poſture, &c.

Preventing retention of urine.

Avoiding coſtiveneſs.

When abortion takes place, to procure its termination aſſiſtance may be given:

1. By irritation of the os tincæ with a finger, as directed p. 90.
2. By rupture of the ovum in the ſame way.

Where placenta retained, its expulſion promoted by occaſional glyſters, and the effects of its retention counteracted by frequent injections into the vagina, with the uſe of the bark and vitriolic acid, to obviate the putreſcent tendency, as detailed vol. I. p. 318.

Future abortion to be prevented by obviating morbid relaxation by the uſe of tonics and cold bathing, as detailed vol. I. p. 311; by favouring uterine diſtenſion; by confinement to bed till after the abortive period; and by removing the conſtitutional taint, where ariſing from a venereal cauſe.

Flooding.

Treated by the ſame preventative remedies as abortion.

False Conception.

To be treated as abortion.

BOOK III.

PARTURITION.

The firſt ſtep preparatory to every delivery is to know when lled the ſtate of the labour, by the touch; and then to adjuſt e bed and dreſs of the patient.

The touch, as formerly deſcribed, is the dexterous introduction one or more fingers into the vagina, the woman being placed her left ſide, the uſual poſition of delivery, with her knees awn up, and her breech towards the ſide of the bed. The eat art on this introduction is to avoid giving pain, which iefly takes place on the ſeparation of the external labia. The nger ſhould therefore be firſt moiſtened with axunge, and being aced on the ſymphiſis, or joining of the pubes, when carried ownwards, will naturally fall into the vagina; after which it directed towards the ſacrum, or rolled round the extremity of ie vagina, ſo as to reach the orifice of the uterus.

By this examination, when the uterine dilatation is once determined as having begun, the particular form of the bed, moſt onvenient for delivery, becomes next the object of attention. The bed of an in-lying woman, for its curtains, and other appenages, ſhould conſiſt of the lighteſt and thinneſt materials, that ne acceſs of the air may be freely allowed; and part of them hould be alſo kept conſtantly open for its admiſſion. As the oftneſs of the uſual feather-bed renders it too eaſily diſcompoſed, y the agitation and change of poſture in the woman during ier intervals of pain, a well ſtuffed mattreſs ſhould be ſpread over t, covered with a piece of ſkin or oil-cloth. Over this laſt, a air of ſheets is then to be laid, in the ordinary way, and a ſeond pair, made in the form of a roller, muſt be placed above hem, in an oppoſite direction, with their ends tucked into the ides of the bed. An old blanket, covered by a ſheet, is after-

wards to be placed, in a ſquare form, directly under the woman's breech, to receive the waters on the rupture of the membranes, and the reſt of the lochia. The remainder of the bed is to be adjuſted in the common way, this ſupernumerary apparatus being moſtly removed where wetted after delivery.

The making of the bed, if the pains continue ſtrong, is immediately ſucceeded by the dreſs of the woman, which, from the degree of agitation during labour, the leſs cumberſome it is made appears moſt proper. It generally conſiſts of an open half-ſhift, covered with a ſhort bed gown, and a linen ſkirt, with a broad band, called the *ſafe-guard*, which ſerves in ſome meaſure, when faſtened, to compreſs the abdominal muſcles, and forms a proper preſſure on the belly, when a little tightened, after delivery, at which time it is neceſſary to be changed.

Theſe preparations of the bed and dreſs are the buſineſs of the nurſe, and are generally over before an accoucheur is called, though it is neceſſary he ſhould be acquainted with them.

CLASS I.—*Natural Labour.*

Duration ſeldom exceeding from ſix to eight hours.

Management conſiſts in,

1. Aſſiſting the natural efforts by preventing ſtraining in the abſence of pain, directing the proper poſition of the aſſiſtant parts, and encouraging the efforts of the patient in the time of pain.

2. Obviating morbid ſymptoms during the progreſs of labour; as,

Sickneſs, by waſhing out the ſtomach, or giving ſome ſlight aromatic infuſion, as mint tea, &c.

Diarrhœa, by opiates in injection, if labour not much advanced.

Suppreſſion of urine, by the uſe of the catheter; and, if head advanced, puſhing the finger betwixt it and the pubes, to allow the catheter to paſs.

Coſtiveneſs, by a laxative glyſter.

Cramp, when in the abdomen, by opiates, and rupture of the membranes; when in the thigh, not to be alleviated until delivery.

Flooding, by cold applications; and, if very profuſe, expediting delivery as ſoon as poſſible.

3. Preparing to receive the child.

As ſoon as the membranes break, the accoucheur ſhould be at

and; but even then it is not neceſſary that he ſhould interere, unleſs he wiſhes to appear very attentive; when in the time of pain, he may ſupport the perinæum with his hand, covered with a cloth held againſt it. When the head is expelled, he places a hand on each ide of it, and waits for a pain, to give the ſhoulders their proper turn, and the body follows. The child is then to be placed on its ſide, beneath the cloths, which the accoucheur endeavours to ſupport over it, and where he allows it to remain for a minute or two, till it cries, or ſhews certain ſigns of life and vigour. Its connection with the mother is then to be ſeparated, by paſſing a ligature on the umbilical cord, at the diſtance of two inches from the navel. Another ligature ſhould alſo be paſt on the ſide next the mother, and the diviſion of the cord then made between them, which will prevent the blood in the placenta itſelf flowing into the bed on the diviſion, and is the moſt cleanly method. The child is then given to an aſſiſtant; and, in the mean time, ſome cordial, as negus, or cinnamon water, adminiſtered to the mother.

4. Removing the placenta.

The great flow of blood which follows the delivery of the child being over, and the uterus reſuming its contraction, in from 15 to 20 minutes, by the occurrence of grinding uterine pains, the accoucheur twiſting the umbilical cord round the fingers of one hand, while the other is higher placed within the vagina, by gently pulling, aſſiſts the expulſion of the placenta, which completes delivery. A roller is then applied round the abdomen of the woman. She is allowed for ſome time to remain in this ſituation, and having aſcertained the ſtate of her pulſe, and the quantity of the diſcharge, ſhe is then committed to the nurſe, while the accoucheur retires into another apartment. When ſhifted and reſted, the accoucheur is informed that he may return, and give the neceſſary directions for the future management, before taking leave.

This is the regular proceſs of 99 caſes out of every 100.

Retention of the Placenta,

From various cauſes, requires ſpecial management.

From morbid adheſion,

To be removed by introduction of the hand, and ſeparating it as directed p. 139.

From rupture of cord,

To be removed by the ſame means, and graſping it firm, without any ſeparation.

From irregular contraction or ſpaſm,

To be removed in the ſame way, joined with the aſſiſtance an opiate.

CLASS II.—*Protracted Labour.*

Duration from twelve hours to four days.

Management conſiſts in,

1. The art of perſuaſion, and ſoothing the patient, ſo as gain time.

2. Reſerving her ſtrength as much as poſſible, by ſuſpendi exertion in the time of pain.

3. Obviating the ſeveral cauſes of delay; as,

Real weakneſs, by a proper uſe of cordials.

Early rupture of membranes, by opiates, and raiſing the he to permit the flowing off of the remaining portion of the wate that may be retained.

Over diſtenſion, by rupture of the membranes.

Fixt irritation, from ſuppreſſion of urine, by the uſe of t catheter, as directed p. 159. From ſpaſm, by opiates.

Coſtiveneſs, by laxative injections.

Rigidity of the os tincæ by irritation with the finger, as dire ed p. 159, in the time of pain: contraction of the parts by ven ſection, and oily injections into the vagina.

General narrowneſs of pelvis, by ſuſpending the exertion the pains, the exhibition of opiates, and every mean of gaini time.

Face preſentation, by altering the direction, as directed p. 1 ſo as to bring it into the natural poſition.

CLASS III.—*Inſtrumental Labour.*

Marked by inefficacy of natural efforts, as diſplayed by ſtate of the labour, and exhauſted appearance of the patient.

For its ſucceſs, all that is neceſſary is patience, perſeverance good hands.

Three circumſtances are eſſential to be attended to in conduc ing every inſtrumental labour; the preparation for it, the ap cation of the inſtrument, and the extraction.

The preparation conſiſts in,

1. Being ſatisfied that the ſtate of the labour is proper for application of the particular inſtrument you are to employ:

ithout this, no entreaty ſhould tempt you to take a raſh ſtep, om impatience on your own part, or that of the patient, which ou may afterwards repent.

2. Removing every obſtruction, by evacuation of the contiguus parts; viz. the bladder and rectum; and,

3. Adjuſting the poſition moſt favourable for the delivery.

Lever.

The lever, or ſimpleſt inſtrument, is applied, the patient lyg on her ſide.

The art in uſing it depends on its proper application, by getg high enough to fix a firm hold.

When the occiput is brought down, the labour proceeds readily.

Forceps.

The inſtrument moſt generally employed is the forceps; and, to ure its ſucceſs, three circumſtances are to be attended to in ng them:

1. That the ſtate of the labour be proper for their application.

2. That the application be fitly made; and,

3. That the extraction be gradual.

With reſpect to the firſt, a proper forceps' caſe is, when the iput preſſes againſt the perinæum, the ears inclined laterally, the head fixed in the cavity of the pelvis.

n all other ſtates of labour, their application is precarious, and uld if poſſible be avoided.

With reſpect to the ſecond circumſtance, or their mode of apcation, their figure correſponds to the ſlope of the ſides of the vis; they are therefore to be placed over the ears, by carrythem in their introduction as much as poſſible againſt the inæum, which will ſecure a proper hold.

The left hand blade is to be firſt introduced, in order to make locking upon the upper ſide, carrying it cloſe to the ſurface he foetal head, which will both prevent injury, and render direction of the hand to the full height leſs neceſſary.

The firſt blade introduced is held in its place by a hand, till other hand, introduced on the oppoſite ſide, confine it from ping; and on this laſt hand, ſo introduced, the ſecond blade is directed. On withdrawing the hand, the blades are to be ed; and, if locking readily, leaving a ſpace of an inch and alf between the blades, the hold is proper. If too cloſe, a cient hold of the bony part is not included.

not locking readily, the hold is improper.

When locked, a ligature is unneceſſary, as occaſioning too much compreſſing, which in pulling ſhould even be moderated.

The efforts of pulling ſhould be moſt violent at firſt, until the head move.

When once moving, the certainty of ſucceeding is undoubted, and hurry is then to be avoided.

The direction of pulling ſhould be firſt downward and backward, or, if not yielding from ſide to ſide, then more directly forward; and, as the occiput is diſengaged from the pubes, it ſhould be upwards, to ſave as much as poſſible the external parts.

To take advantage of the natural efforts where they occur is a good general rule; but to wait for them, when the forceps are applied, no practitioner ſhould think of.

The forceps are not merely, as Dr. DENMAN remarks, to ſupply the want of natural pains; their uſe proceeds farther, and is meant to give actual aſſiſtance where pains are of no avail.

The ſecond forceps' caſe requires the blades to be applied from pubes to ſacrum, the poſition of the woman in doing it being on her left ſide.

The extraction here, inſtead of pulling, begins by giving a quarter turn, ſo as to reduce the head to the natural preſentation; when, the poſition of the woman being changed to her back, the extraction proceeds in the natural way.

The third forceps caſe differs nothing from the firſt, either in the application or extraction.

Face Caſes.

When requiring the forceps, have their application regulated by the particular circumſtances of the preſentation, and the rules already detailed will apply.

Long Sciſſars and Crotchet.

The ſucceſs here depends on a proper command of the preſenting part, a full diminution of the head, and a gradual extraction.

The firſt is effected by a proper poſition of the patient, on her knees and elbows; and by the preſenting part being wedged in the pelvis, or being kept firm by preſſure on the abdomen.

The ſecond requires a proper length of ſciſſars, ſo as to perforate the bony texture of the cranium; and the perforations are to be made at more than one place.

The third is the moſt difficult; and, after the hold is ſecured before proceeding to the extraction, the injured parts of the head ſhould be ſo covered with the teguments, as to prevent wounding the paſſage in the progreſs of delivery.

Whenever the hold ſlips, the extraction ſhould immediately ſtop, and the hand be introduced, to aſcertain the cauſe of it, and a new hold taken.

To avoid the uſe of the crotchet in future deliveries, three modes of prevention are recommended:

1. To prevent complete evolution, or growth of the child, by the treatment of the mother during pregnancy, conſiſting in an abſtemious regimen and frequent ſmall bleedings.

2. To produce premature labour, in the ſeventh or eighth month.

3. To enlarge the pelvis, by SIGAULT's operation. This operation is performed by cutting through the tegiments and linea alba, at the upper and centrical part of the ſymphiſis pubis, when, the finger being introduced as a director, the ligaments and cartilage are next divided, and the ſeparation completed. The after-treatment conſiſts in preventing or abating the effects of inflammation, which are here often conſiderable.

Dr. OSBORNE's *improved Crotchet Practice.*

The ſucceſs here lies in four circumſtances; viz.

1. The early diminution of the head.

2. The total removal of the cranial bones.

3. An intervening period between the diminution and extraction; and,

4. An attention in the extraction to the dimenſions of the pelvis.

Cæſarian Operation.

Previous treatment the ſame as for any important operation in ſurgery, particularly emptying the bladder and rectum.

Inciſion, either lateral or umbilical, carried ſlowly through the teguments and ſubjacent parts, till the peritonæum is laid in view.

Veſſels then taken up by ligature. When done, a ſmall hole is to be made in the peritonæum, into which a finger introduced as a director, will guide the inciſion made with ſciſſars to a ſufficient length. A preſſure then to be made on the abdomen by the hands of aſſiſtants, to circumſcribe the ſituation of the uterus before the internal inciſion. Middle of the uterine ſurface at preſents to be then opened, ſo as to introduce a finger, avoiding the ſituation of the placenta. Inciſion extended on the finger for a ſufficient length, and the extraction of the child and ſecundines then made as quickly as poſſible, to prevent hæmorrhage.

If the child's head be locked in the brim of the pelvis, a finger introduced into the vagina, to raiſe it.

Operation finiſhed, by removal of clotted blood effuſed.

After-treatment conducted—

1. By promoting adheſion of divided parts, by ſtraps of adheſive plaiſter, or the dry future (*vide* vol. II. p. 23.), and the uſual dreſſings.

2. By circumſcribing incipient inflammation, which is beſt done by careful removal of every extraneous ſubſtance from the abdomen, before uniting the wound, and afterwards regularly removing ſuch parts of the dreſſings as will allow a free diſcharge of any fluid collected.

CLASS IV.—*Manual Labours*

Require in their treatment a diviſion into two ſtages,—the preparation and delivery.

The preparation conſiſts in determining the poſition of the child, by examination external and internal, rendering the ſtate of the uterus favourable to delivery by a large opiate, and directing the poſition of the patient, which is either the ſide, the knees and elbows, or, towards the termination of delivery, the breech.

The delivery conſiſts in reducing every ſituation, by turning to a footling caſe, and extracting in that form.

Turning, performed by the introduction of the hand in the manner directed, page 230.

Footling Caſe.

Diſtinguiſhed on rupture of the membranes, by the heel and want of the thumb.

Labour ſhould proceed naturally till the head deſcends into the pelvis. Aſſiſtance then given by wrapping a cloth round the limbs, and pulling gently at each pain, and ſhifting the hold farther up as it advances, till the breaſt appear.

Back of the fœtus muſt then be to the pubes; and if not, to be effected by giving it a turn.

When deſcending the length of the ſhoulders, the arms to be then brought down, as directed page 231.

When brought down, head to be then extracted, and the various difficulties oppoſing it obviated, as in page 233.

Natal Caſe.

Marked by the cleft between the buttocks, and by the genitals.

Two methods of delivery practiſed.—Either allow it to advance naturally, or puſh up the preſenting part, on once aſcertaining it, and bring down the foot or feet, when it is reduced to the former caſe.

Tranſverſe Caſe.

Diſtinguiſhed by early rupture of the membranes; no part of the child felt; often the cord prolapſed.

The hand, in every variety of this caſe, to be introduced, and the feet brought down.

Brachial Caſe.

Known by the feel of the hand; the delivery always difficult, though depending, for the degree of it, on the time of the rupture of the membranes.

The treatment conſiſts—

In preparing for turning, by aſcertaining the exact ſituation of the feet, and relaxing the uterus by an opiate.

The hand then introduced as directed page 239.

When the hand cannot be introduced, the ſhoulder of the child to be raiſed by the operator's fore-finger and thumb, placed as a crutch under the axilla, ſo as to gain room for its paſſage.

Failing in theſe attempts, a ſpontaneous evolution of the child to be allowed as the laſt reſource.

CLASS V.—*Anomalous Labours.*

1. *Flooding.*

Firſt ſtep to diſtinguiſh the ſituation of the placenta, both by the ſymptoms and examination.

When properly attached, treatment conducted by enjoining a horizontal poſture; by cold applications to the uterine region; by refrigerants in liberal doſes, as in Volume Firſt, page 295; and by

mild nourishments, in small quantities. When attended with pyrexia, bleeding sometimes admissible.

The flooding abating, motion to be avoided, as endangering a return.

When placenta improperly attached, known also by the symptoms and examination: delivery then the only certain relief.

To be attempted as soon as possible; or when marked by the appearance and decay of strength of the patient.

If pains attend, natural delivery is to be preferred, breaking the membranes as soon as within reach, and occasionally irritating the os tincæ, in order to expedite the delivery.

When no pains occur, artificial delivery then unavoidable; performed as directed page 253, the success of which depends on its steps being slowly conducted. So soon as the membranes are broken, a proper abdominal compression is to be applied, in proportion to the relaxation of the uterus in the progress of delivery, and the strength of the patient supported by a proper use of cordials.

When floodings occur in the progress of labour, delivery is to be expedited, if necessary, by the forceps, as soon as the presentation is within reach.

Consequences of flooding to be obviated as directed in p. 255.

2. *Convulsions.*

Treatment to be palliated by venesection, opiates in glyster and a powerful irritation to the face, by dashing it frequently and, as it were, instantaneously, with cold water. As soon as the forceps can be applied, delivery to be completed.

3. *Prolapsed Funis.*

Treatment, introducing the hand; passing the cord beyond the presenting part, and retaining it there until presenting part sufficiently engaged to prevent its return. Neither turning nor forceps admissible in this case.

4. *Plurality of Children.*

Signs all uncertain until delivery of one, membranes then to be broken, and presentation of the head allowed to proceed; if not the head to be turned, and feet brought into the passage. But cords joined when extracting placent; and, if not readily yielding, the hand to be introduced.

5. *Extra-Uterine Labour.*

No treatment admiſſible here, but truſting to nature; expelling the production, by the proceſs of inflammation in her own way, except in abdominal caſes, taken notice of under the head of Cæſarian operation, page 225.

BOOK IV.

Child-Bed.

The ſituation of the patient ſhould be airy and free; her poſture, with the head and ſhoulders raiſed; and every attention paid to preſerve her quiet and unruffled.

Pain is to be obviated by the uſe of anodynes, which are variouſly combined, according to the uſage of different places.

In England, they are combined in mixtures with ſpermaceti and tincture; in Ireland with aſafœtida; and in France, with oily draughts.

The ſimpleſt forms, however, are beſt; as,

Tinct. Opii gutt. xxx.
Aq. Cinn. f.
Syr. Simpl. a ℥ſſ. m. fiat. hauſt.

To be repeated every night while the pain continues.

Pil. Pacific.

Two at bed-time.

Aq. diſtillat. ℥ſſ.
Ol. Amygdal. dulc. ℥ij.
Syr. Balſam. ℥j.
Elix. Paregoric ℥j. m. ft. hauſt.

Spermaceti, ℥ſſ.
Sacchar. alb. ℥j.
Mucilag. G. Arabic ℥j.
Tinct. Opii gutt. xxx. m. ft. hauſt.

Vide alſo vol. I. p. 283.

When watchfulneſs the only ſymptom, and opiates diſagree, or will ſucceed; as,

℞ Caſtor. Ruſſic. recenter Pulver. ℈i. ad ℈ij.

The doſe to repeated after an hour, till it ſucceed.

Where the after-pains aſſume the form of ſpaſm, the opiate to be exhibited in glyſter, either ſimply, or combined with aſafœtida, as in page 329.

Fomentations alſo applied externally, as in vol. II. page 413.

Thirſt is to be abated by the uſe of cooling drinks, viz. toaſt and water, Cow milk whey, gruel, &c.; or as in vol. I. page 275.

Coſtiveneſs is to be obviated by mild laxatives, as in vol. I. page 296; or, what is preferable, by an emollient glyſter, every ſecond day, as in vol. I. page 276.

Diſeaſes of Child Bed.

Faintings.

Faintings of the mild ſpecies removed by proper abdominal preſſure, a ſupine poſture, and the uſe of gentle ſtimulants, as, ſteams of vinegar to the noſe, or moiſtening it with lavender or Hungary water, giving a little negus or cinnamon water occaſionally, with a free admiſſion of cool air.

Faintings of the ſecond ſpecies admit little relief, except warm applications, to reſtore the vital heat, in addition to the former treatment.

Hæmorrhage.

To be checked by a free application of cold: as cloths dipped in oxycrate, applied to the abdomen and back; cold water daſhed on the abdomen, and injected with a bag and pipe into the uterus.

Raiſing the patient ſuddenly to the erect poſture, ſo as to bring on fainting or delirium; giving large doſes of opium; and failing by theſe means, irritation of the os tincæ with the finger, to excite the contraction of the organ.

Recovery generally takes places, if ſurviving ſix hours.

Partial Injuries.

Swelling of Parts removed by fomentations, as in vol. II. p. 413: by emollients, as in vol. II. p. 337; and the uſe of the catheter.

Laceration of the Bladder palliated by Saturnine waſhes, as in vol. II. p. 412; by preſſure againſt the part; by a ſponge peſſary adapted to it; by the occaſional introduction of a bougie into the urethra; and by the general means of invigorating the ſyſtem in the uſe of tonics and cold bathing.

Incontinence of Urine palliated till the tone of the parts is repaired; by thick compreſſes applied, to abſorb the moiſture.

Rupture of the Uterus treated by immediate delivery, and afterwards obviating pain and inflammation.

Inflammation of the Uterus depends on the general means of abating inflammation, by the antiphlogiſtic courſe, as directed vol. I. p. 276; and by warm fomentations to the part, as in vol. II. p. 413.

If ſuppuration takes place, treatment proper as directed vol. II. p. 413, with the uſe of bark and opium internally, to haſten it.

Prolapſis of the Uterus, in its *mild* ſtate, yields to a horizontal poſture; ſtyptic waſhes, as in vol. II. p. 449; and the uſe of general tonics, as the bark, ſteel, and cold bathing.

In the *complete* ſtate, in addition to theſe means, it requires alſo a mechanical ſupport, or the application of a peſſary.

Peſſaries are of various kinds; the ſimpleſt of them is the ſponge, prepared in the following manner: let a piece of ſponge be ſoaked in alum water, of a certain ſize, accommodated to that of the vagina, and let a thread be paſſed through it, ſo that it may be eaſily withdrawn. This ſponge is to be introduced, covered looſely with a piece of linen, which will allow its expanſion during the time it is retained arrangement; injections are to be thrown up of alum water, or ſugar of lead. After a few days, it is to be withdrawn, and a ſmaller ſponge, according to the degree of contraction in the paſſage, introduced anew, and the ſame ſucceſſive change of ſize is to take place, until it can be entirely laid aſide. A compreſs and bandage will retain them in their place. But peſſaries of a firmer ſubſtance are required, when the diſeaſe is of long ſtanding; and theſe are of ivory, wood, ſteel, and ſometimes of cork and ſponge, covered with wax; but, from their brittleneſs, they do not anſwer well. The elaſtic reſin has been alſo tried, but does not anſwer, from turning too ſoft in the vagina. The box wood or ivory are found to anſwer beſt: they are made with a ball and ſocket, when they are ſupported by ſtrings tied round the waiſt and thighs; but their motion occaſions their fretting the parts.

The form of a plain circular ring is, therefore, preferred: it ſhould be covered with a piece of linen; and a bit of tape ſhould be faſtened to the edge, to facilitate its extraction. The great art in its introduction is to adapt the ſize to the ſtate of the parts; for it ſhould be ſo large as to be introduced with difficulty,

and occaſion ſomewhat of a painful ſtretching, one edge being placed to the pubes, the other to the perinæum, until it paſs between the iſchia, by the projections of which it is ſupported: when it is turned for this purpoſe in the other direction. It ſhould be withdrawn every eight or ten days, that no incruſtations may take place, and then introduced anew.

Fevers.

Weed.

Ephemera, or weed, to be treated as directed in vol. I. p. 339, particularly in the uſe of mild diaphoretics.

Lacteal, or Milk Fever.

Beſides the uſual antiphlogiſtic means, detailed in vol. I. p. 276, requires particular attention to the local affection, or breaſts, as directed vol. II. p. 130. 262. and alſo p. 431, and 445.

Miliary Fever.

To be treated in the mild ſpecies by the antiphlogiſtic courſe, as in vol. I. p. 276.

To be treated in the malignant ſpecies as a typhus, vol. I. page 301.

Puerperal Fever.

Treatment as directed vol. I. p. 310.

MANCHESTER MEDICAL SOCIETY

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THE

CLINICAL GUIDE;

PART IV.

CONTAINING

THE TREATMENT

AND

Diſeaſes of Infancy and Childhood:

WITH

A VIEW OF NOSOLOGY.

MANCHESTER MEDICAL

THE

CLINICAL GUIDE;

OR, A

CONCISE VIEW

OF THE LEADING FACTS ON THE HISTORY, NATURE, AND TREATMENT,

OF THE

STATE AND DISEASES

OF

INFANCY AND CHILDHOOD.

WITH AN APPROPRIATE

PHARMACOPŒIA,

Divided into Three Parts, viz. Materia Medica, Classification, and Extemporaneous Prescription:

INTENDED AS

A MEMORANDUM-BOOK FOR PRACTITIONERS.

TO WHICH IS SUBJOINED,

AN INTRODUCTION TO NOSOLOGY;

OR, A VIEW OF

THE MOST APPROVED NOSOLOGICAL SYSTEMS,

PARTICULARLY THAT OF THE LATE DR. CULLEN;

Adapted, with certain Alterations, to

THE PRESENT WORK.

BY WILLIAM NISBET, M.D.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH, ONE OF THE SURGEONS TO THE ROYAL INFIRMARY, NOW OF LONDON.

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PREFACE.

THE medical treatment of Diſeaſes of Infancy, though a ſubject of much importance in practice, has only of late had that attention paid to it by phyſicians that it merited: the works, therefore, on this department of medicine, are few in number, and their limits not ſo far extended as the variety of ſubjects occurring in the routine of infant practice warrants. Having, in the former volumes of this work, gone through a general detail of practice in medicine, ſurgery, and midwifery, it ſeemed to remain unfiniſhed while the ſtate of infancy, and its diſeaſes, did not meet the ſame detail: an additional volume, therefore, to contain the Treatment and Diſeaſes of Infancy, was deemed proper to complete the plan; and that is now offered to the Public, it is hoped in ſuch a manner as to be equally uſeful with the other parts of the work.

This volume contains alſo a View of Noſology; a part too little attended to, and from his knowledge of which chiefly, or his juſt diſcrimination of the nature of diſeaſes from external appearance, the reputation of a phyſician ſhould properly be eſtimated. The ſyſtem of Dr. Cullen is adopted, with ſuch alterations as it is hoped will render it ſtill more uſeful; and with references to the diſeaſes, as treated in this and the preceding volumes.

St. James's-ſtreet,
Sept. 20, 1800.

MANCHESTER

CONTENTS.

PART I.

	Page
TREATMENT of Infantile State . .	16
1. In Change of Atmosphere . . .	17
2. In Change of Circulation . . .	ib.
In change of Nourishment	18
Of Milk	19
Of additional Nourishment . . .	24
Of Weaning	25
Of bringing up by the Hand . .	26
Of Sleep and Watching	27

PART II.

Diseases of Infancy	28
Causes of these	ib.
Incomplete Animation	30
Fainting	ib.
Still-Birth	31
Discolouration of Parts	32
Red Gum	33
Retained Meconium	35

Page
Jaundice 36
Roſe 37
Œzena 38
Thruſh 39
Skin-bound 42
Early Convulſions 43
Lockjaw 44
Inward Fits 46
Abdominal Complaints . . . . . ib.
Watchfulneſs 47
Vomiting 48
Inflammation of Stomach 50
Gripes 51
Looſeneſs . . . . . ib.
Incontinence of Stools 56
Worms . . . . . ib.
Convulſions 59
Palſy 63
Epilepſy 64
St. Vitus's Dance 65
Loſs of Speech 67
Nightmare 66
Excoriations of Skin 68
Auricular Abſceſs 69
Fevers 70
Catarrhal Fever 71
Stomachic D° . . . . . ib.
Inteſtinal D° 72
Conſequence of D° 73
Intermittent D° . . . . . ib.
Dentition 76
Dentile Fever 79
Dentile Convulſions 80
Diſeaſes of Throat 83
Mumps . . . . . ib.
Croup 85

Page
Coughs 88
Symptomatic . . . . . ib.
Primary 89
Chincough . . . . . ib.
Common Spafmodic Cough . . . 92
Cutaneous Difeafes . . . . . ib.
Rafh 93
Baftard Itch 94
Milk-Blotches 95
Anomalous Eruptions 96
Nettle-Rafh . . . . . ib.
Veficatious 97
Scorbutical Eruption . . . . . ib.
Grocer's Itch 98
Baftard Herpes 99
Small Pox 100
Diftinct Species 101
Confluent Species 103
Meafles 106
Chicken Pox 109
Inoculation 110
Cow-pock 112
Scarlet Fever 115
Miliary Fever 117
Scald Head 118
Herpes 120
Itch . . . . . ib.
Venereal Difeafe 121
King's-Evil 132
Watery Head 134
Mefenteric Fever 138
Hectic Fever 140
Rickets 141
Difficulty of Urine 143
Suppreffion of Urine 144
Stone 145

Page
Incontinence of Urine 146
Exceſſive Thirſt . . . . . ib.
Inflamed Eyes 147
Film or Speck 151
Cataract . . . . . ib.
Stye 152
Deafneſs 153
Canker of Mouth 154
Gangrene of Cheek 155
Swelling of Breaſts 156
Abſceſs of Belly 157
Lumbar Abſceſs . . . . . ib.
White Swelling 159
Curved Spine and Paralytic Extremities ib.
Debility of Extremities 160
Debility with Diſcolouration . . . 161
Curvature of Bones 162
Whitlow . . . . . ib.
Boil . . . . . ib.
Chilblains 163
Burns . . . . . ib.
External Injuries of Bones 164
Luxations . . . . . ib.
Fractures . . . . . ib.
Morbid Adheſion of Tongue . . . 165
Swallowing of Tongue 166
Hiccough 167
Bleeding at Noſe . . . . . ib.
Affections of Navel 168
Hæmorrhage . . . . . ib.
Ulceration 169
Imperfect Separation of Cord . . 170
Swelling of the Prepuce . . . . . ib.
Falling-down of the Gut 171
Diſcharge from the Vagina 172
Contaminated Wounds 173

Page
Congenite Diſeaſes 175
Deranged Circulation . . . . . ib.
Deficiency of Cranium 174
Cranial Tumors 176
Spina Bifida 177
Parenchymatous Tumors 180
Congenite Hernias . . . . . ib.
Hydrocele 183
Imperfection of Parts . . . . . ib.
Of Vagina . . . . . ib.
Anus 184
Penis . . . . . ib.
Lips 185
Ears . . . . . ib.
Eyes 186
Feet . . . . . ib.
Original Marks . . . . . ib.
Pharmacopœïa Infantilis 189
Materia Medica 190
Claſſification 200
Extemporaneous Preſcription.
View of Noſology.
Rules for Noſology.
Syſtems of Authors.

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INTRODUCTION.

I. HEALTH conſiſts in the ſeveral parts of the body enjoying their particular functions; and as theſe functions are found more or leſs complete at birth, ſo the tendency to future health or diſeaſe becomes, in conſequence, coeval with life.

II. The functions of the ſyſtem, at birth, differ in ſome reſpects from what afterwards take place; and in order to underſtand this difference, a previous conſideration of the fœtal ſtate, or that imperfect exiſtence which precedes birth, and the peculiarities which attend it, it is neceſſary to be acquainted with.

III. From the view of the formation of the uterine contents, formerly detailed (vide vol. iii. p. 26), the life of the fœtus may be divided into three periods, drawn both from its apparent ſtate of exiſtence and its mode of nutrition.

IV. With reſpect to the former, we obſerve, that from the firſt detection of the fœtus, to the period when the punctum ſaliens appears, it enjoys entirely, as far as can be traced, a ſtate of vegetable exiſtence, which may be termed the period of ſimple animation; from the appearance again of the punctum ſaliens to the period of motion, when the mother herſelf is conſcious of its exiſtence, may be named the period of incomplete animal life; and from theſe firſt faint motions of the fœtus, which gradually increaſe and become ſtronger, to the time of geſtation, may be conſidered as the period of complete animal formation.

V. In regard to the latter, or mode of nutrition, the ſame diviſion is allowable; for, on conſidering the ſtate of the fœtus, at firſt, the connection between the vegetable and animal kingdom ſeems ſtrongly ſupported: its nouriſhment it ſeems to receive originally from the ſurface; and it is not until the umbilical veſſels are fully formed that the mode of nutrition is altered. Hence, during the firſt period, ſimilar to ſimple vegetable life, it draws its nouriſhment from the ſurface or ſurrounding fluids, and betrays no evident marks of exiſtence. The ſecond period may be viewed as that of limited animal life, when it gives proofs of its poſſeſſion of it, but when its powers are ſtill ſo contracted as to be incapable of forming nouriſhment for its ſupport, but receives it through certain veſſels of the ſyſtem of the mother; and the third period is that of the full or complete poſſeſſion of the animal powers, when it is ſeparated from its connection with the parent, and the neceſſary changes in its frame occur, fitting it for ſupporting life.

VI. To judge of the neceſſary changes that then take place in the ſyſtem of the fœtus, its peculiarities, or difference of ſtructure from the adult, fall to be noticed. Theſe peculiarities, though more obviouſly diſplayed in its circulation, may yet be traced through every part of its ſyſtem; and they may, therefore, be divided into thoſe which ſeem intended merely to adapt it to its ſituation, and into thoſe which have alſo a certain influence on its paſſage to delivery.

The former conſiſt in,

1. The different courſe of its circulation; and
2. The ſtate of particular organs; and

The latter, in the different connection of its more ſolid parts.

Fœtal Circulation.

VII. In deſcribing the courſe of its circulation, the placenta poſſeſſes, we obſerve, at its ſurface next the child, one large vein, which, running along the umbilical cord, compoſes the principal ſhare of it, and, entering the navel of the fœtus, terminates in the vena portarum. In order, however, to prevent the whole blood ſent by the placenta from circulating through the liver, which, as being poured into the vena portarum, it would do, a communication between the latter and the vena cava, peculiar to the fœtus, is formed; and in this way part of the blood is allowed to take a different courſe, or to paſs directly into the cava: from the vena cava the blood is ſent to the right auricle of the heart; and in the adult, from the right auricle it is all diſcharged into the right ventricle. But inſtead of this, in the fœtus, a communication between the two auricles takes place, by a ſort of orifice covered with a valve, which is named.

from its appearance, the foramen ovale. By this means one half of the fluid, which ſhould naturally paſs into the right ventricle, and from that into the pulmonary artery, to circulate through the ſubſtance of the lungs, by paſſing immediately into the left auricle, is directed into the aorta, and the pulmonary artery is ſtill farther deprived of its proportion of circulation to the lungs, by another communication peculiar to the fœtus taking place between it and the aorta; ſo that in this way, on a groſs calculation, by the communication between the auricles, the lungs are deprived, we may ſuppoſe, of nearly one half their circulation, compared with the quantity of fluid that paſſes into their ſubſtance after birth; and by the ſecond communication, between the pulmonary artery and aorta, they are deprived of a part more; ſo that only one-fourth of their proper circulation is admitted into them, or merely what is ſufficient to preſerve their vitality, ſimilar to any other part poſſeſſing no peculiar or important function. The blood then paſſing in theſe ways into the aorta, is diſtributed through the body; and that portion of it entering the internal iliac arteries, which, in the fœtal ſtate, are larger than the external, contrary to what happens in the adult, is directed into two branches ariſing from them, peculiar to the fœtus, which, piercing the navel, form the umbilical arteries, and carry the fœtal blood to be tranſmitted through the circulation of the placenta, where it is ſuppoſed to receive certain neceſſary changes, adequate to what ariſe from the uſe of reſpiration after birth.

VIII. Though this is the moſt common opinion of the courſe of the fœtal circulation, yet many objections have been urged, by different authors, againſt it.

The firſt that deſerves attention is that propoſed by Mr. Mery, in the Memoirs of the Royal Academy of Surgery, who obſerves, that the capacity of the pulmonary artery is larger than that of the aorta in the fœtal ſtate; that the right ventricle is more capacious than the left; and that the pulmonary veins are much ſmaller than the branches of the vena cava. From theſe obſervations he infers, that did the circulation proceed in the manner explained, the capacity of the left auricle ſhould be ſuperior to that of the right, and that the aorta ſhould be larger than the pulmonary artery: but as this is not the caſe, he is led to believe that the blood muſt purſue a different route. The blood then, being received from the vena cava into the right auricle, is puſhed from it into the ventricle; from the ventricle it is directed into the pulmonary artery; and by the latter is diſtributed through the ſubſtance of the lungs, except where part of it paſſes into the canalis arterioſus, being returned to the left ventricle by the pulmonary veins; from which it is partly directed again into the right auricle, through the foramen ovale, and partly paſſes into the left ventricle, from which it is ſent into the aorta, and is thus diſtributed over the ſyſtem. In this way the greater part of the maſs of blood purſues, in the fœtus, a very ſhort courſe.

IX. This theory was favoured by a number of authors, who pretended, by diſſection, to ſupport his diſcovery; while it is controverted again by others of equal reſpectability, who deny the facts on which it is founded. Mr. Winslow, the celebrated anatomiſt, has endeavoured to reconcile this theory with the common opinion entertained, by obſerving, that, from the com-

munication between both auricles, the heart is to be conſidered as poſſeſſing but one auricle, forcing the blood into two diſtinct ventricles; that from the one ventricle it is ſent into the pulmonary artery, while the canalis arterioſus prevents greater part of it from paſſing into the lungs; and from the other ventricle it is tranſmitted immediately into the aorta. But in this way, it may be remarked, the valve of the foramen ovale is rendered uſeleſs; and we cannot ſee any reaſon for the peculiar diſpoſition of the fœtal circulation if this takes place.

X. A later theory than this is one propoſed in the Peterſburg tranſactions, where, inſtead of the communication of the foramen ovale being admitted, it is, on the contrary, maintained that no connection prevails at all between the auricles. This theory is ſaid to be likewiſe founded on anatomical obſervation, and is prefaced by the author, with obſerving, that as, after birth, the contraction of both auricles is ſimultaneous, or performed at once, ſo blood cannot poſſibly be received from the one into the other, or the contractions of them muſt be performed at different times. This, however, cannot be ſhown; and if it could, it is probable that, after continuing for the whole of the fœtal ſtate, it ſhould remain for the whole of life. This theory is founded on an obſervation, that the vena cava, before going to the heart, divides into two branches; one of which enters at the right auricle, and the other paſſes into the left at the ſituation of the foramen ovale.

There is, indeed, a great deal in the reaſoning employed by this author to ſupport his theory; but farther obſervation is neceſſary to confirm it; and the merit of

his diſcovery as yet reſts merely with himſelf. The old opinion, therefore, is ſtill more generally followed, though it may be difficult to aſcertain in what, preciſe manner the veſſels peculiar to the fœtus are ſo eaſily contracted after birth; for, in the ſpace of a very ſhort time, we find almoſt no veſtiges of the courſe of the former circulation to be traced.

State of Fœtal Organs.

XI. From the fœtal circulation, the peculiarity moſt dwelt on by authors, we examine next the ſtate of its organs;—and the firſt to be noticed is that of the lungs.

The lungs of the fœtus appear, on diſſection, of a compreſſed form, more ſolid, and darker coloured, than after birth. This proceeds from the ſmall quantity of blood, which, from the courſe of the fœtal circulation, neceſſarily enters their ſubſtance; and from this circumſtance of their increaſed ſolidity, at this period, an attempt has been made to aſcertain, by experiment, in caſes of ſtill-birth, whether the child has once reſpired. As an opinion is frequently required on this ſubject, and the fate of the mother determined by it, it is neceſſary that it ſhould be made with the ſtricteſt accuracy, and thoſe ſeveral accidental circumſtances marked which may influence its iſſue.

This experiment conſiſts in cutting out a portion of the lungs, and throwing it into water; for before reſpiration, as they contain no quantity of air to render them ſpecifically lighter, but are equally ſolid with any other part of the body, it will naturally ſink, while, if reſpiration has once commenced, and that for a period however ſhort, the reverſe will take place. But in thoſe caſes, where, after death, the child has been retained in

the uterus for ſome time, and a degree of putrefaction has been induced, although there has been no inflation of the lungs, yet, on immerſing them, they will continue on the ſurface of the fluid, from a quantity of air, the effect of putridity, generated in their ſubſtance. But, in this caſe, ſeveral other parts of the body, which are naturally denſer than water, will be found, from the ſame cauſe, to undergo the ſame change; and therefore ſeveral parts of the body ſhould always be tried, to prevent any fallacy in the experiment. Another circumſtance too, that may influence its iſſue, is the particular part of the lungs from which the portion is taken for the experiment. Thus, if a child, though dead born, is laid on its face, the upper part of the lungs will frequently come to be inflated, though it has never properly breathed; and if any of this upper part is taken, it will ſwim, thereby leaving us to form an opinion different from what is really juſt. Beſides, children, we know, frequently die at birth, after two or three inſpirations, either from the difficulty of the previous labour, or a morbid ſtate of the ſyſtem. Hence, from this experiment, no concluſive opinion can be properly drawn. The ſituation of the mother, and other circumſtances, muſt determine her fate; for the accoucheur, after performing the experiment with the greateſt accuracy, on account of the fallacy which may take place, can only hint ſuſpicion, but offer no decided opinion.

XII. In the adult, the action of the lungs is found of great importance to the brain, and they poſſeſs a certain alternate motion with each other. This would ſeem neceſſary to preſerve an active ſtate of the vital power; for, in the fœtus, when this motion does not take place, we have reaſon to believe that a general inſenſibility, or

what may be termed incomplete life, prevails; and of this we have proofs in the very great preſſure which the brain is then capable of bearing.

XIII. The next organ to be remarked, from its contiguous ſituation, is the thymus, a glandular body peculiar to the fœtus, and placed over the great veſſels which are ſent from the heart. This body, in the fœtus, is very large; it remains after birth, but gradually decreaſes; and in the adult its former ſituation cannot be detected: its uſes we are unacquainted with. Many conjectures, indeed, have been formed on them; but theſe appear far from impreſſing any conviction of its real nature. Mr. Hewson has conſidered it as an appendage of the lymphatic ſyſtem, and that it bears a chief part in the formation of the red globules of the blood; but blood, we find, appears in the placenta while the fœtus is yet in a pellucid ſtate; and this blood, therefore, being carried to the fœtus in a perfect ſtate, does not require any organ like this to render it more complete. The chief circumſtance of difficulty, with regard to this gland, is to account for its decreaſe. In the fœtus it ſeems evidently ſupplied by ſeveral veſſels.—We cannot, after birth, perceive any mechanical cauſe to operate in effecting its diminution: we can only therefore conclude, that its decreaſe muſt be owing to an obſtruction of its circulation, preventing the tranſmiſſion of fluids to it in the former quantity. The manner, however, in which this happens, we are not acquainted with.

XIV. The next organ in order, deſerving notice, is the liver. Its ſize exceeds greatly its proportion with

the other organs of the fœtus, ſo as to fill both hypochondria; and its colour is alſo conſiderably paler: but the cauſe of this we cannot pretend to aſcertain.

XV. The kidneys alſo, in the fœtal ſtate, differ ſomething in their ſtructure. They are divided into diſtinct lobuli, ſimilar to thoſe of the quadruped; but this diviſion ſoon departs after birth: and the uſe of ſuch a peculiar ſtructure we cannot determine, further than as it may leſſen the quantity of ſecretion, which is at this period unneceſſary.

XVI. The next peculiarities are found in the genital organs.

Thus the bladder of the fœtus is more oblong than it is in the adult; and from the upper part there ſeems to proceed a particular duct, called the urachus, though it is here different from what is obſerved in the quadruped; for there it is a real duct, connected with a particular membrane, named the alantois, the cavity of which ſerves for the reception of the urine of the fœtus: but, in the human fœtus, it forms merely a ſuſpenſory ligament; and, by preſſing the bladder, you are not able to force into it a ſingle drop of urine. Many authors, however, pretend that it is a real canal, and that they have been able to fill it by injection; though this is a point that admits ſtill of conſiderable doubt.

XVII. In the male, during its continuance in the uterus, the teſticles are found contained within the abdomen; and it is not until birth, and even ſome time after, that they gain their proper ſituation. They ſeem originally ſituated near the kidneys, and gradually de-

ſcend as geſtation advances. The cauſe of their original ſituation we cannot eaſily explain: it has afforded much conjecture to moſt phyſiologiſts, and the explanation of it remains ſtill myſterious. From this circumſtance of their deſcent, which is at the ring of the obliquus deſcendens muſcle, when preſſure is applied, either from delivery or accidentally, ſome ſhort time after birth, before a proper adheſion of the ſides of the ring takes place, ſome portion of inteſtine is puſhed through this part, forming hernia; and from the period at which it happens, it receives the particular appellation of congenita. To know this diſeaſe,—when a fullneſs appears at this part, it is neceſſary to aſcertain whether both teſticles are already in the ſcrotum: if they are, we are certain it is owing to the former cauſe. But, in many inſtances, it has been obſerved that one teſticle is longer in deſcending than the other; nay, that it has not happened until after the age of puberty, and has even never taken place: and in Mr. POTT's treatiſe there are ſeveral examples of the former, where the true deſcent of the teſticle itſelf, at a late period, was miſtaken for hernia.

With reſpect to the treatment of hernia congenita, little is neceſſary, for at this early period it ſoon diſappears, and the inteſtine is retracted within the abdomen. All mechanical aſſiſtance therefore, by bandaging, is improper. The diſeaſe ſhould be left to time, and the part merely ſupported by the hand, when any increaſed preſſure takes place, from crying, or any other cauſe.

XVIII. Analogous to this original ſituation of the teſticles in the male, may be mentioned a peculiarity of the female, particularly conſpicuous at this time; viz. the

hymen. It conſiſts of a ſmall membranous expanſion, in the form of a creſcent, ſhutting up the entrance of the vagina. This membrane has been denied by many authors as ever exiſting. The late Dr. HUNTER uſed to obſerve that he never ſaw it wanting in a female fœtus; that it is the inaccuracy of the obſerver that prevents its detection. Its delicacy expoſes it at all times to accidental rupture; and we have very few inſtances of its remaining entire until the age of puberty: hence it can be no proper teſt of virginity, as was formerly imagined. In ſome rare inſtances, when it has remained entire at the age of puberty, morbid ſymptoms have occurred from this cauſe; for the menſtrual diſcharge being retained, comes to be collected in a quantity, that at laſt ſenſibly enlarges the uterus ſimilar to pregnancy. From external ſymptoms, it has been generally ſuppoſed, therefore, owing to pregnancy; and its ſymptoms conſiſting in down-bearing pains, ſuppreſſion of urine, &c. very much reſemble thoſe of abortion. It is only then to be detected by examination, when it is found commonly of a firm membranous texture. The ſymptoms of this complaint proceed gradually. The pains are felt, at firſt, only at each ſucceſſive return of the menſtrual period, when they go off, as the action of the uterus, neceſſary to this diſcharge, ceaſes. But their continuance, in a ſhort time, comes to be longer at each period, as the organ increaſes by diſtenſion, and at laſt they are conſtantly felt, occaſioning the moſt uneaſy painful ſtate. The removal of this diſeaſe is very ſimple: it conſiſts merely in dividing the membrane, by plunging an abſceſs lancet into its middle, which is to be carried for ſuch a length and depth as to allow a ſufficient opening for the diſcharge. This generally conſiſts of a dark

thick blood, reſembling in its appearance melted pitch. It poſſeſſes no fœtor or other ſymptom of putreſcency, in conſequence of its ſecluſion from the external air; and in ſuch caſes it has been diſcharged, even to the quantity of ſome pounds. The inciſion ſhould be healed over a piece of ſponge, and care taken to prevent a re-union of the parts, by keeping them divided, and that no excoriation may ariſe from the remains of the evacuation acquiring an acrimony in its diſcharge. For this purpoſe frequent injections ſhould be thrown into the vagina.

XIX. But, in ſome rare inſtances, it is not merely a membranous expanſion which is the cauſe of the obſtruction; the vagina itſelf ſeems filled with a ſolid fleſhy ſubſtance. The operation is here uncertain in its iſſue, and requires often a trocar to be paſſed for a conſiderable way up; of which a ſingular inſtance is related in the ſecond volume of the Medical Commentaries, where no leſs than four or five quarts of retained fluid was diſcharged, which had been collecting for a period of ſeven years.

XX. Along with theſe ſexual peculiarities may be mentioned the ſtate of the eye at birth. Viſion we find not ſo diſtinct then as afterwards. The pupil does not ſuffer ſuch a ready contraction, and the aqueous humour is rather in too great quantity, ſo as to render the form of the eye more convex. There is, even before birth, a peculiar membrane obſervable running acroſs the eye, which hides the pupil, and has a number of veſſels conſpicuous in it. This membrane, from its effect, is named the membrana pupillaris. It is deſcribed by HALLER and other authors; but thoſe fœtus in whom it is ob-

ſervable had not arrived at the term of geſtation. It is not diſcoverable after birth, ſo that its uſe we are ignorant of.

The ear, we find likewiſe, as well as the eye, imperfect at birth.

XXI. The breaſts of children of both ſexes, immediately after birth, it is remarkable, are found ſomewhat turgid, and contain a whitiſh or milky fluid. The cauſe of this we cannot explain. It generally departs, when left to itſelf, in a few days, and it ſeldom occaſions much uneaſineſs: nor ſhould any thing be done, as is too commonly the caſe, to remove the fluid by preſſure.

XXII. Thus we have conſidered the firſt diviſion of the fœtal peculiarities, or thoſe which are intended to adapt it to its ſituation during its uterine ſtate. In addition to theſe, it may be remarked that the nervous ſyſtem of the fœtus is larger in a proportion exceeding what afterwards takes place; that the veſſels poſſeſs the ſame over-proportion, which is, indeed, neceſſary for the facility of growth: hence, in children, the difficulty experienced in ſtopping hæmorrhage, after the ſimple application of a leech.

XXIII. We come next to conſider the ſecond diviſion of the fœtal peculiarities, or thoſe which are neceſſary to its ſafety in delivery. Theſe conſiſt in the connection of the more ſolid parts, and in the ſituation of ſeveral of the organs.

Connection of the Fœtal Solids.

XXIV. The firſt is diſplayed in the connections of the bones of the head: this is more neceſſary, as it forms

commonly the preſenting part, and as, by its preſſure, the paſſage is opened for the expulſion of the reſt. While then, in the adult, it conſiſts of ſix different bones, connected by ſutures or mutual indentations, inſtead of the latter, in the fœtus, its bones are not fully elongated, and therefore united merely by different membranous expanſions, the breadth of which is eaſily contracted by compreſſion. The chief of theſe expanſions connecting the parietal bones is the fontanelle or bregma. At the end of two years, this part, in a healthy child, is nearly oſſified. In delivery, where felt, it is eaſily diſtinguiſhed by the pulſation of the frontal ſinus; and it thus directs to a knowledge of the ſtate of preſentation where it is doubtful.

XXV. This mode of connection, which is ſo remarkably diſplayed in the cranium, we find alſo extended to the other bones. They are of a ſoft flexible nature, and looſely connected at their ſeveral articulations: hence, even where a good deal of force is exerted to bring down ſome of the extremities in præternatural labours, it is very rare that any accidents of fracture or diſlocation happen. As the head is intended to precede the other parts in delivery, the latter ſeem on this account ſomewhat contracted in their natural ſize: thus the cheſt is ſmaller than uſual in the fœtus; the pelvis too does not poſſeſs the common proportions it afterwards bears. With the ſame intention to avoid any injury happening to the organs during delivery, we find them all placed higher than afterwards; ſo that they may receive, in ſome meaſure, protection from the thorax: hence it is very rare, that when the head paſſes, the other parts of the body do not readily follow; and it is from this cauſe of the organs being all placed higher in the fœtal ſtate that

a præternatural ſituation of them is at times met with; for we cannot well trace it to any other cauſe.

Situation of the Fœtal Organs.

XXVI. The particular ſituation of the fœtal organs has been very accurately deſcribed by M. Portal of Paris, who, in a memoir to the Royal Academy of Sciences, has drawn a compariſon between their ſituation at this period and in more advanced life. From this memoir can be eaſily accounted for the frequent miſtakes of phyſicians with regard to the ſeat of diſeaſe in childhood. Thus the ſtomach, in infants, inſtead of being placed tranſverſely, as is the caſe in adults, hangs almoſt perpendicularly. By this means the ſituation of ſeveral parts of the inteſtines is different from what happens afterwards: the bladder of urine, in particular, is alſo much higher than in advanced life, being ſituated above the os pubis, and deſerves attention, for this reaſon; that when lithotomy, which is often the caſe in childhood, is unavoidable, the high operation ſhould, perhaps, be preferred, as the bladder will be more eaſily reached.

The ſituation alſo of the genital organs, in the female, at this period, differs ſomewhat from what takes place afterwards.

Changes at Birth.

XXVII. Theſe are the chief peculiarities of the fœtal ſyſtem, which fit it for its previous ſtate of exiſtence; on birth, however, a conſiderable alteration takes place; and that alteration depends on,

1. The change of its atmoſphere.
2. The change of its circulation; and,
3. The change of its nouriſhment.

1. *Of Atmoſphere.*

XXVIII. The change of the fœtal atmoſphere, at birth, may be conſidered as from 90, or 100, to that of our temperature frequently in winter under the freezing point; this change, therefore, cannot fail to be ſevere on the conſtitution of the child: it is alſo ſudden in its application, and inſtantly affects the lungs or internal parts; hence the uneaſineſs it creates induces the child to cry and to betray every mark of pain and diſtreſs. The application of heat, therefore, at this period, is highly proper, and deferring the neceſſary changes of dreſs, &c. is a neceſſary ſtep of precaution, till it is habituated ſomewhat to its new ſtate. Whether, at this period, the conſtitution of the child has a greater power of generating heat, to avoid the conſequences of this ſudden change of ſituation, has not been determined; nature, however, it is probable, has in this reſpect made ſome proviſion, not yet aſcertained, ſince we find children bear this ſudden alteration of temperature ſo well. On our part, every attempt ſhould be made to render the tranſition as ſmall as poſſible. The child ſhould be kept warm the moment it is received from the parent; the dreſs ſhould be looſe, warm, and eaſily adjuſted: preparatory to this, the firſt waſhing ſhould be with lukewarm water; nor ſhould the expoſure be long, nor any rough attempts made to ſeparate the mucus from the ſkin at once: it is a covering intended by nature to be only gradually removed; and when too rapidly done, both an unneceſſary expoſure of the child, as well as excoriation from the attempts, is liable to enſue.

2. *Of Circulation.*

XXIX. The change of its circulation muſt be equally ſevere on the child as the change of its atmoſphere. The

blood, which paſſed formerly in ſome degree independent of the lungs, and through which only one fourth part of their natural circulation was tranſmitted, ruſhes ſuddenly into them, and the coats of theſe veſſels become, of courſe, diſtended in a violent degree. That this change is attended with ſome difficulty, we know, becauſe, in many inſtances, the ſyſtem of the child is unable to accompliſh it, and the fœtal veſſels remaining in part open produces a ſtate of the circulation which proves fatal. Beſides the lungs, the circulation to the lower extremities is alſo increaſed, and a new acceſſion of blood paſſes through the iliacs, which alters the proportion of the internal and external arteries of that name. Until theſe changes in the circulation fully take place, as marked by the ſtopping of the pulſation in the umbilical cord, no ſeparation betwixt the mother and child ſhould be made. This change occaſions alſo the fluids of the fœtus, independent of the order of circulation, to acquire new properties, which they either did not previouſly poſſeſs, or but in a very ſmall degree; and the acquiſition of theſe properties muſt naturally give them more activity in pervading its veſſels, and farther to undergo the changes which ſecretion and excretion produce on them. Their acquiring theſe properties, however, muſt add to the uneaſineſs which the alteration of the fœtal circulation neceſſarily creates to the child.

3. *Of Nouriſhment.*

XXX. The nouriſhment of the child is a change equally important with the other two. In the fœtal ſtate it is nouriſhed by a fluid previouſly prepared, and already animaliſed; after birth, it is preſented with a fluid only in part animaliſed, but eaſily converted or aſſimilated

into this ſtate. This nouriſhment appears, as we have ſeen, ſo early as twenty-four hours after delivery; and this period is the time pointed out by nature for the application of the child. Its efforts, at firſt weak, to elicit it from the organ, are gradually increaſed, till it flows in a full ſtream; a neceſſary relief, as formerly obſerved, to the ſtate of the mother as well as the child. This nouriſhment differs ſomewhat in its ſpecific nature, or is peculiar to the particular claſſes of animals for which it is deſigned; hence the variety obſervable in the proportion of the principles which the milk of different animals exhibits. This nouriſhment does not, as during the fœtal ſtate, paſs directly into its circulation; it is received into organs formerly in a collapſed or inactive ſituation: theſe it diſtends; and by them, from their increaſed vitality or power of action, the conſequence of birth, it is fitted for entering the circulation in a complete animaliſed or nouriſhing ſtate.

XXXI. The appropriate circumſtances then neceſſary in this fluid, for the purpoſes of nouriſhment, are,

1. That it ſhould be ſuited to the particular claſs of animals for which it is deſigned.

2. That when received, it be in a healthy or proper aſſimilatory ſtate; and,

3. That it be ſupplied in quantity ſufficient to nouriſh the animal receiving it.

Of Milk.

XXXII. The firſt circumſtance leads to an inveſtigation of the milk of different animals, ſo as to eſtabliſh the peculiarities that diſtinguiſh it in the human ſubject.

In its external appearance, milk is a fluid of a beauti-

ful opaque white colour, nearly as limpid as water, and of a pleaſant emulſive taſte. This fluid, ſubmitted to chemical examination, is found to conſiſt of four different parts:

1. An oily or inflammable part, convertible into butter.

2. A coagulable part, convertible into cheeſe.

3. A ſaccharine matter, or ſugar of milk, termed the ſaccharine acid; and,

4. A proportion of common ſalt.

XXXIII. The proportion of nouriſhment derived from different kinds of milk appears clearly to depend on the quantity of their oily and ſaccharine parts; and the proportion in which theſe prevail in the milks of different domeſtic animals, is in the following ſcale:

Women's milk diſcovers moſt of the oily and ſaccharine matter.

Cow's milk has nearly the ſame proportion of oily but leſs of ſaccharine matter.

Goat's milk, in its proportions, is much the ſame.

Aſſes' milk is nearly equal to women's in its ſaccharine matter, but deficient in its oily part.

Sheep's milk exceeds women's in its oily part, but falls ſhort in its ſaccharine matter.

Mare's milk poſſeſſes little of the oily, but a great deal of the ſaccharine matter.

XXXIV. From this ſcale, the diſtinguiſhing quality of women's milk is an exceſs both of oily and ſaccharine parts, compared with the milk of other animals commonly in uſe; hence it conveys a more perfect nouriſhment to the child than the milk of other animals can beſtow.

XXXV. From this compoſition, then, milk may be properly conſidered as water, holding diſſolved in it a ſaline matter, approaching in its nature to ſugar, a very bland oil, and a coagulable fluid of the ſame nature with the coagulable part of the ſerum. By means of this the oil is mixed with the watery part, as it were, into an emulſion; and by mixing ſimilar ingredients artificially together, a very exact imitation of milk may be made. It is from the coagulable matter it derives its diſpoſition to curd by acids and heat. From the ſaccharine or ſaline matter it is diſpoſed to aceſcency; and, in ſome kinds of milk, this ſaline matter being more purely ſaccharine than in others, can be made to undergo the vinous fermentation.

XXXVI. The compariſon of milk with the yolk of an egg is ſanctioned by the ſimilarity of their nature. To the chick the yolk performs the ſame office as the milk to the child: it poſſeſſes a communication with the ſtomach of the chicken by means of the bag in which it is lodged, and ſupplies the animal with nouriſhment after it is hatched. On being diluted with water, it forms a fluid not unlike the milk, and can, on many occaſions, be ſubſtituted for it. It contains a leſs quantity of ſaccharine matter, which can be ſupplied by a ſmall addition of ſugar; and from its large proportion of coagulable matter, it can be employed to promote the union of more oil than what it contains with water: its proportion, however, of oily matter, is ſo great, that a conſiderable quantity can be procured from it by expreſſion.

XXXVII. From theſe circumſtances then, in the

variety of the milk of different animals, it is clear that every animal muſt be beſt nouriſhed by the milk of that ſpecies to which it belongs: any ſuccedaneum, therefore, for this, is incomplete; and where it is neceſſary to have recourſe to it, an imitation of the proper proportion of the principles of the milk peculiar to that ſpecies of animals ſhould always be made.

XXXVIII. We have thus conſidered the firſt circumſtance to be attended to in the nouriſhment of the child: the next, or that the fluid, whoſe general principles have been thus aſcertained, be in a healthy ſtate, is a point equally important.

In its natural ſtate, human milk poſſeſſes, we have ſeen, little of the caſeous part; of courſe, that a leſs proportion of it is liable to coagulation than that of other animals. The agents of coagulation we know to be heat and acids. In this proceſs of digeſtion the ſeparation of its coagulable part muſt, therefore, in a certain degree, take place, from the temperature in which it is placed, and the action of the gaſtric fluid, which poſſeſſes a little acidity. In many caſes, it would ſeem that the proportion of the caſeous part is greater than it ſhould be; and that, in conſequence, from the greater ſeparation of coagulum, digeſtion is in ſome degree ſuſpended, and the fluid is unfit for anſwering the purpoſes deſigned: in other caſes, the gaſtric fluid, though in health ſlightly acid, acquires, in conſequence of fever, or the weakened powers of ſtomach, a morbid acidity, which it communicates to the milk, and renders it unfit for the purpoſes of nouriſhment; hence, wherever milk ſeems to diſagree, and the nouriſhment of the child to be incomplete, an examination ſhould take place,

whether it depends on a faulty ſecretion in the fluid drawn from the mother, or in an impaired ſtate of the organ receiving it. The firſt may be judged of by an examination of the milk, and ſubmitting to chemical inveſtigation the proportion of the principles contained in it, which may be corrected, where deficient, by the regulation of the diet of the nurſe; the ſecond, when aſcertained, which is chiefly by the four evacuations, may be obviated by the uſe of alkalies and abſorbents in a proper quantity.

XXXIX. The third circumſtance neceſſary is the quantity in which the ſupply of fluid is requiſite for the child. This muſt be regulated particularly by the conſtitution and digeſtive powers themſelves. Thus, as in adults, though the quantity of nouriſhment requiſite for one child is much leſs than for another, in the choice of a nurſe an abundant ſupply is the point always to be aimed at: her general health, therefore, the particular appearance of the breaſt itſelf, and the age of the milk, as inſuring this ſupply, are eſſential circumſtances to be conſidered, when the mother does not nurſe, in the preference of a ſubſtitute.

XL. In this manner does nature proceed in ſupplying nouriſhment to the child. It firſt ſupplies it, as we have ſeen, by the powers of the mother alone; it is next drawn from the ſame ſource in a leſs perfect ſtate, in order to be completed by the organs of the child, which are now fit for this office; and as the progreſs of the child advances, and its organs are ſtronger, an additional ſupply becomes neceſſary from another ſource, to aid this more ſimple nouriſhment, which the mother has hitherto beſtowed. The particular time when this

addition is required, and the nature or quality of this addition, are ſubjects which have much divided the ſentiments of phyſicians, and require, therefore, attention.

Of Additional Food.

XLI. Judging from what nature points out, ſuch ſupply we ſhould conſider as unneceſſary until the teeth begin to appear, or ſuch inſtruments as are capable of preparing a different aliment. That this is the intention of nature there can be no doubt. Civiliſed life, however, has rejected the intimation, and this addition is begun at a much earlier period. Generally at the end of the firſt month, according to the beſt directions, a little boiled bread is added to the natural nouriſhment; and in doing this the bread ſhould be deprived as much as poſſible, by previous boiling in water, of its aſceſcent quality. At firſt this addition ſhould be ſparingly made, and only given once a day. No animal food, even in the lighteſt form, ſhould be allowed, until the child is able to walk.

When a proper number of teeth appear, the child is then capable of ſupporting itſelf on another aliment than this firſt ſupply from the mother; and it is, therefore, proper to withdraw it. The exact period, however, of this, or weaning, muſt be regulated by circumſtances of the child's conſtitution and progreſs.

The firſt, or natural nouriſhment, continues generally in abundant ſupply for a twelvemonth; and no appearances, commonly on the part of the mother, by a return of menſtruation, indicate that it ſhould be ſooner laid aſide. Before this, the ſupply of additional aliment ſhould be increaſed to the child, and its nou-

riſhment made as independent as poſſible of the fluid it is ſoon to want. When withdrawn, a ſomewhat ſimilar nouriſhment ſhould be ſtill continued, and the organs of the child not injured at firſt by a diet of difficult aſſimilation.

Weaning.

XLII. But even with the beſt management, the withdrawing the natural food, ſo long its accuſtomed ſuſtenance, or weaning, is attended with ſome ſlight derangement of the ſyſtem of the child. This is more apt to happen, as faſhion has now introduced its being withdrawn at a very early period, viz. in the 6th, 8th, or 10th month; and even ſome have given the length of doing it at 3 or 4. Nature, however, ſhould here be our guide, and extremes avoided. Before weaning takes place, the attention ſhould be directed to the child's taking of food, and the ſtate of his bowels. Whenever he is capable of the former, and no irregularity prevails in the latter, it may be ſafely done; and that by putting ſomething diſagreeable on the nipple, as ſoot or aloes. If, in the courſe of it, diarrhœa enſue, it is to be treated as directed under the head of this particular diſeaſe, viz. diarrhœa and gripes; and particular regard paid to the choice of the particular food which ſeems to agree beſt with the child.

XLIII. This is the uſual progreſs where regular nurſing takes place, or when the mother herſelf, or a ſubſtitute, gives the natural fluid appointed for the nouriſhment of the child; but when circumſtances do not admit this ſupply coming from the human ſubject, and

children are reared by the hand, a close imitation of this plan is still requisite in order to its proving successful.

Bringing up by the Hand.

XLIV. This imitation consists in rendering the fluid received from other animals as nearly in the portion of its parts the same as human milk.

To render it also more animalised, and deprive it of ascescency, a small mixture of a light jelly should be added; and to increase its saccharine part, the characteristic of human milk, some sugar may also be put to it. It should be given in a luke-warm state, or in the natural temperature as received from the animal: and it is further improved by previous boiling, so as to lessen its laxative tendency. The proportion of these additional ingredients, to fit it for the nourishment of the child, must depend on the milk of the particular animal employed. Cows' milk is generally used, and it requires the greatest proportion of them; but, in weakly states of body, asses' milk should be preferred.

XLV. Various instruments have been made use of to administer this supply: the forms of these may be seen by consulting the different authors who have written on this subject. The easiest mode of application should be preferred, and the pot is therefore most generally employed.

XLVI. By this artificial mode of rearing children, the same degree of nourishment is not exactly conveyed as by the human milk: an additional supply of other aliment, therefore, becomes sooner necessary, and the

organs of the child, accuſtomed ſooner to exert their powers in preparing this artificial nouriſhment, are ſooner able to receive that of a different kind. This addition ſhould conſiſt of light animal ſoups. This change may be begun at four or five months, and the ſoup ſhould be joined with a mixture of bread, once a day; and it may be alſo alternated with bread and milk. When further advanced, light ſolids, in the form of pudding, may be next permitted; and, when teeth are once acquired, animal food may be given in a ſolid form, though in a ſparing manner.

Sleep and Watching.

XLVII. In this way is the child to be reared to the period of weaning; but, beſides its nouriſhment, other circumſtances are to be attended to in conducting it to this period. Theſe are with reſpect to its ſleep, and watching.

The child at birth, in coming from the paſſive fœtal ſtate, has a natural tendency to doſe or ſleep much: this, perhaps, ſhould rather be favoured, being the effect of the important changes which take place in its ſituation when uſhered into the world. All children, therefore, in health, ſleep much during the firſt four days, or even longer, unleſs prevented by diſeaſe. In the fœtal ſtate, children are ſuſpended in a fluid, or kept in a certain buoyancy or motion: this points out, that, while awake, they ſhould be kept much in motion, or exerciſed in the arms of an attendant; and alſo, while in ſleep, that the ſame motion ſhould be imitated by the uſe of a cradle. The propriety of this active ſtate is pointed out by the nature of the infantine conſtitution, which, from the minuteneſs of its veſſels, and their ſtrong tendency to

accumulation along with the excefs of fluids always abounding in their fyftem, requires every aid of exercife to diffipate their fuperfluous parts.

XLVIII. We have thus confidered the general principles to be adopted in conducting the management of children, during the period of nurfing, or the firft twelvemonth of their exiftence. Though by this management, ftrictly obferved, many diſeaſes may be prevented, yet as theſe, under certain circumſtances, will unavoidably rife, it is next proper we fhould inveſtigate the various diſeaſes to which infancy and childhood are fubjected.

DIVISION II.

Diſeaſes of Infancy.

XLIX. The diſeaſes of children admit different arrangements. The moſt uſeful in practice is that which conſiders,

1. Thoſe diſorders which are the immediate conſequence of birth; and,

2. Thoſe that ariſe from conſtitutional or accidental cauſes.

To the firſt diviſion belong all the affections within the month, and likewiſe all the congenite diſeaſes.

To the ſecond the various maladies of a conſtitutional and ſpecific nature.

L. The cauſes of infantine diſeaſe may be referred to three heads:

1. Conſtitutional laxity and irritability.

2. Improper diet; and,

3. Want of exercife.

LI. The firſt of theſe is the natural foundation of the future growth, and of the neceſſary changes that are afterwards to enſue; it is therefore to be conſidered only as a cauſe of diſeaſe, when, by deviation from nature in the rearing of the child, it is attended with morbid effects. The morbid effects of this cauſe are chiefly to be prevented by the uſe of the cold bath. It ſhould be begun with to every child by the time it is three months old; and continued every morning from that period, except in caſe of diſeaſe, until it is four or five. In doing it, one dip is ſufficient; and proper friction ſhould be employed afterwards, until the natural glow is reſtored.

LII. Improper food is one of the moſt frequent cauſes of infantine diſeaſe; and as all faults of digeſtion in children conſiſt either in the production of a tenacious ſlime or morbid acidity, the means pointed out are evident when affections ariſe from this cauſe.

LIII. Want of exerciſe in civiliſed life is the frequent ſource of diſeaſe in infancy. The young of all animals take much exerciſe; and nature points out the deſire for it, in order that a regular ſecretion and excretion may at this period proceed for a proper and uniform growth. Every part alſo acquires ſtrength and vigour in proportion to the exerciſe it receives: when exerciſe, therefore, is neglected at this time, glandular affections muſt naturally enſue, the foundation of which is laid in that very ſtate of conſtitution eſſential to growth.

LIV. From theſe three cauſes, then, viz. from the natural infantine habit itſelf, from improper diet, and from want of exerciſe, we conſider all the diſeaſes to which childhood is ſubjected as ariſing.

From the firſt, they are diſpoſed to all the acute diſeaſes, particularly thoſe of a ſpecific nature; and from the two laſt, combined with it, to all the affections of the primæ viæ, of the ſkin, and of the glands, which are ſo frequent at this period.

LV. The diſeaſes of children are often difficult to diſtinguiſh. The pulſe affords no proper criterion; for its quickneſs precludes examination. Their temperature alſo affords only an uncertain information. Their general health is to be judged of chiefly from the ſtate of the fontanels and ſkin.

If the former are too looſe and ſeparated, they mark diſeaſe.

If the latter is relaxed, particularly the ſkin of the ſcrotum, and not corrugated, there is then a morbid ſtate of habit exiſting.

Incomplete Animation.

LVI. The firſt affection to be noticed at birth is what may be termed incomplete animation, and is either general or partial.

The firſt comprehends two ſpecies, varying in degree, viz. fainting, or ſyncope, and ſtill birth.

Fainting.

LVII. Fainting is a very rare occurrence, but has been known to take place. A feeble pulſation of the heart is ſtill felt during the fit.

The treatment conſiſts in the uſe of volatiles, the ſame as in the adult: thus a few drops of volatile tincture of valerian may be given every two hours till recovery takes place.

Still-Birth.

LVIII. Still-birth is a more frequent occurrence. The animation is here ſo ſmall as hardly to betray any appearance of it: we are not, however, from theſe ſmall appearances, to ſuppoſe it entirely extinct. Under theſe circumſtances, moſt unexpected recoveries have taken place; and the ſuppoſition of the total extinction of life will often prevent the proper means being employed, or at leaſt perſevered in. In a former volume, we deſcribed all the ſymptoms of the extinction of life previous to birth; and pointed out their uncertainty. In the ſame way, after birth, unleſs actual appearances of putreſcency prevail, no ſymptom can be depended on but the real experience of the inefficacy of the means employed for reſtoration after a reaſonable time; for in the child, at birth, the vital principle is particularly apt to be ſuſpended from its natural imperfect animation; and where only paleneſs of the body, lividity, coldneſs, and want of reſpiration, are the prevailing ſymptoms, every effort ſhould be employed to render its animation complete.

LIX. The propriety, however, of immediately inflating the lungs, has been called in queſtion, and with ſeeming juſtice, by ſome authors, till animation is ſomewhat reſtored.

The fœtal life, it is clear, does not require for its continuance the proceſs of reſpiration, but a freedom of circulation through the organs already in uſe: the reſtoring, therefore, the circulation, by the means already pointed out, ſeems the primary indication; and the proofs of its reſtoration will appear by the bleeding of the cord, and the glow of colour on the lips and countenance. When this is once obtained, inflation of the lungs may then be attempted, to render the animation complete.

LX. A frequent cauſe of ſtill birth, alleged by ſome authors, is the filling up the fauces and trachea with the liquor amnii or mucus previous to birth.

This collection of the liquor amnii is generally removed by the action of labour; but when this does not completely take place, it may prove an impediment to the exerciſe of the functions at birth; and its exiſtence, therefore, is always to be had in view before other means are employed.

LXI. The different means employed to recover this ſtate are; firſt, warmth, as covering the child with warm cloths, and uſing the warm bath; and, ſecondly, exciting the action of ſome of the principal organs, particularly the lungs, primæ viæ, and umbilical circulation.

The firſt is performed by blowing forcibly into the trachea or windpipe, and then expelling it again from the lungs, by preſſure againſt the diaphragm and breaſt; ſtimulating the noſe and throat with a feather, &c.

The ſecond conſiſts in the uſe of warm glyſters into the rectum, particularly of tobacco-ſmoke.

The third depends on immerſing the placenta in warm water, and forcing the blood through it into the circulation of the child.

In addition to theſe means, friction of the ſurface with ſtimulants is to be joined, alſo forcibly ſtriking the ſoles and nates.

LXII. The partial ſpecies of this diſeaſe, or of incomplete animation, conſiſts in a diſcolouration of the face and extremities, often of the whole ſurface. This diſcolouration is either the effect of preſſure in delivery, or, without this, of mal-conformation, and an interruption taking place in ſome parts of the circulation. The parts

in this caſe are firſt black, then change to a leaden colour. At times this appearance is very partial; at other times it is more general. In ſome caſes it is temporary; in others recurrent.

LXIII. Our prognoſis is determined by its appearance as a temporary affection; and, if recurring, by its not ſhowing the ſame deepneſs of tinge as at firſt; for, where this laſt prevails, it is generally fatal.

LXIV. The treatment lies in promoting a freedom of circulation to the ſkin by heat, and exciting the action of the primæ viæ.

The firſt is done by gently chaffing the affected parts before the fire.

The ſecond by the exhibition of a glyſter, or the exciting vomiting.

Where very partial, the application of a leech may remove the accumulation.

Red-Gum (Strophulus Intertinctus).

LXV. The red-gum is an efflorescence of ſpots, varying in their ſize and appearance, confined to the ſuperior parts of the body, particularly the face, cheeks, and neck, fore arms, and back of the hands; but frequently extending alſo in its progreſs over the whole ſkin. They are generally, though not always, preceded by ſome diſorder of the ſyſtem. They are commonly alſo attended with coſtiveneſs.

LXVI. The varieties of their appearance are either ſmall ſpots, puſtules filled with a limpid or ſtraw-co-

loured ſerum, which dries, turns horny, and ſcales off; or it ſhows itſelf in ſmall points, like pin-heads, of a pearly colour, and opake.

LXVII. The duration of this affection is uncertain. It continues often permanent for a conſiderable time; or, if tranſitory, is ſucceeded by repeated appearances of the ſame kind, the ſucceſſions of which vary in the exact period of their intervals.

LXVIII. A ſpecies of this diſeaſe, termed the white-gum, deſerves to be noticed merely from the difference of its appearance; but, as forming nothing ſpecific in its nature, nothing further occurs in its treatment.

LXIX. This diſeaſe is ſuppoſed merely the effect of the external air or friction of the clothes producing a ſtrong determination to the ſkin. It appears indeed, in ſome children, coeval with birth; in others not till ſome days or weeks after. Thus it would appear rather the ſymptom of an internal acrimony affecting the ſurface of the primæ viæ, and from the ſympathy between the two ſurfaces thrown out on the ſkin.

Hence the two diſeaſes of gum and aphthæ appear to alternate with each other.

LXX. For the cure of this diſeaſe, two indications preſent themſelves:

1. The treatment of the external ſurface itſelf; and,

2. The removal of the internal acrimony, for the moſt part connected with it.

The firſt depends on a proper application of heat, ſo as to prevent the ſudden diſappearance of the diſeaſe,

or its being thrown in upon the internal parts; the 2d on the uſe of abſorbents and laxatives.

Where any uneaſy ſymptoms of ſickneſs or depreſſion ariſe before this removal takes place, gentle cordials, the uſe of the ſemicupium, and attention to the temperature of the atmoſphere, will be effectual in overcoming it.

Retained Meconium.

LXXI. An accumulation of the meconium, or bile, in a highly animaliſed ſtate, precedes birth; and, when not diſcharged after it, is productive of various complaints, as indigeſtion, flatulence, pain, &c. often aſcribed to a different cauſe.

LXXII. The ſeat of this matter is the larger inteſtines, and the other parts of them are almoſt entirely free of it; it is therefore from its action here, or its being found in one part, it is more apt to produce ſuch morbid ſymptoms than if it were more diffuſed.

LXXIII. Its diſcharge, therefore, takes place as a natural proceſs during the firſt days after birth, from the increaſed ſenſibility of the inteſtines acquired by the changes then ariſing, and perhaps alſo from the admixture of this matter with atmoſpheric air then admitted to it, which mixture alters its former animaliſed ſtate. Where ſuch change, however, either on the parts containing it or the ſecretion itſelf, does not enſue, from its being retained, it becomes the object of medicine to relieve it.

LXXIV. This is done by the uſe of laxatives, of which a proper ſelection is neceſſary.

The moſt natural laxative is the milk, which at firſt is allowed to poſſeſs this quality; but where the milk is ineffectual for this purpoſe, then ſyrup of roſes or of buckthorn, given, diluted in gruel, by tea-ſpoonfuls, will anſwer the purpoſe; or a little honey in whey; or a ſlight infuſion of rhubarb; or a few drops of antimonial wine, much diluted.

LXXV. Though theſe means are generally ſufficient, yet, in many inſtances, more powerful ones require to be had recourſe to; but, previous to it, the uſe of injections ſhould be tried, and the removal of part of the meconium in this way will often give an action to the bowels, which occaſions the reſt to be ſoon diſcharged. Should theſe attempts fail, from ſome peculiar torpor of habit, then ſenna, jalap, or calomel, or ſome of the more powerful or draſtic medicines, will then be unavoidable; though much obſervation and caution are neceſſary to direct their proper doſe.

LXXVI. As the cauſe of children's complaints are, at this period, often miſtaken, to know whether ariſing from the preſent ſource, particular attention ſhould be paid to the ſtate of the diſcharge from the time of birth; and unleſs a proper evacuation of the meconium has appeared, the morbid ſtate is clearly the effect of retention.

Jaundice (Icterus Infantum).

LXXVII. The icterus infantum is diſtinguiſhed by the ſame yellow colour of the ſkin as in the adult, though in infants the nails are remarked to be free from its tinge. In its progreſs, when continuing ſome

weeks, the yellow deepens, or changes to an orange colour.

LXXVIII. It is attended alſo with the ſame lethargic ſtate as in the adult; but it is here particularly dangerous, from the child being unable to ſuck. It ariſes from viſcid matter obſtructing the mouths of the biliary ducts, ſeldom from the meconium; and this viſcid matter therefore may be combined either with obſtructed meconium or not.

LXXIX. This diſeaſe has been remarked as more frequent to the children of ſome countries than others. It is not apt to be received before birth; but it can be communicated from the mother to the child during the period of nurſing.

LXXX. The cauſe of infantine jaundice is much the ſame as in the adult; but, by being of a milder nature, it requires a leſs complicated treatment.

An emetic may be given; and the ipecacuanha is here preferable, in a doſe of three or four grains, as being more certain in its operation than the antimonials. The emetic may be ſucceeded by a laxative, and a few grains of rhubarb are the beſt form of it. The repetition of this plan every two or three days will be ſufficient to effect a cure; but, if the diſeaſe ſhould continue obſtinate, ſaponaceous medicines may then be had recourſe to.

Eryſipelas (Eryſipelas Infantilis).

LXXXI. The infantine eryſipelas conſiſts of blotches, various in their appearance, and rapid in their pro-

greſs, acquiring ſoon a purpliſh or leaden hue, becoming exceedingly hard, and tending frequently to mortification.

LXXXII. Its attack is generally a few days after birth, ſeldom exceeding the month, though ſometimes later; and at times its attack has been known to precede birth.

LXXXIII. The ſituations it occupies are various, as every part of the body is occaſionally its ſeat; but its violence is always in proportion as it departs from the extremities, or affects the trunk and ſuperior parts.

LXXXIV. In diſſections of this diſeaſe, where fatal, a ſimilar ſtate of the inteſtines is diſcovered; and the external inflammation, therefore, is probably merely a conſequence of the internal inflammation.

LXXXV. This diſeaſe is commonly very quickly fatal, and that in a few days. Various methods of treatment have been purſued; but the tonic plan, combined with an antiſeptic local treatment, has been the moſt ſucceſsful.

The beſt tonic is a decoction of the bark, with aromatics, given frequently,

To the parts, compreſſes, dipped in camphorated ſpirits, are the moſt ſucceſsful application.

In ſpite of all, however, it is a diſeaſe frequently experienced fatal.

Ulcerous Noſtril (Ozena Infantilis).

LXXXVI. The ozena of infancy is diſtinguiſhed by a

discharge of matter from the nose, first purulent, and then sanious; a purple-streaked eye-lid towards its verge; a difficulty of breathing, particularly in sleep; and an external fullness of the throat and neck, discovering, on inspection internally, the tonsils tumified, of a dark red hue, with ash-coloured specks, frequently ulcerations.

LXXXVII. This disease appears with various degrees of violence, and is therefore differently described by authors. Its progress is generally rapid. Dissections afford little information on its nature; and the fatal termination, after some days' increasing debility, takes place either by the attack of convulsions, or the increasing debility itself preventing altogether sucking or swallowing.

LXXXVIII. From the apparent symptoms, the use of tonic and antiseptic medicines seems particularly indicated. The bark should be given in decoction or glyster, joined with cordials. The same remedies should be exhibited to the wet-nurse. The acrimony of the discharge on the adjacent surfaces of the nose and throat should be prevented by antiseptic washes, and by a favourable position of the child for its external discharge. Blisters are improper, as tending to produce gangrene of the part.

Aphthæ (Thrush).

LXXXIX. The thrush is an eruption of spots, appearing generally about the third week, or within the month, on the lips and inside of the mouth, which con-

tinues to ſpread, and at times affects the whole of the alimentary canal, appearing externally at the anus.

XC. This diſeaſe, from its appearance, is of three ſpecies; the white, the red, and the black.

XCI. The white or mild ſpecies is generally preceded by an inclination to doſe or ſleep. It appears ſpreading thinly over the lips and tongue, in the form of white curdy ſpecks, which do not increaſe after two or three days. They then turn yellowiſh and brown, which is generally in ſeven or eight days, when they depart; after which, the ſame appearances are apt to be ſucceſſively renewed.

XCII. The ſecond ſpecies, or the malignant, is marked by ſpots of a darker colour, and are more extended than the former. It is alſo often combined with a ſpecies of eryſipelas, and accompanied with ſome degree of fever, griping or four green ſtools, &c.

XCIII. The third or black ſpecies is very uncommon, and may be conſidered as an aggravated ſpecies of the ſecond.

XCIV. This diſeaſe is not properly attended with fever as a primary ſymptom; but it frequently ſupervenes in its progreſs, when the eruption is extenſive, and ſymptomatic of ſome other affection. Along with the fever, there is alſo frequently griping or looſe ſtools, of a watery or four green colour.

XCV. The cauſes of this diſeaſe are evidently morbid

acidity or indigeſtion, when occurring as a primary diſeaſe, in which form it appears within the month, and then it may be conſidered as the effect of improper diet and confined ſituation.

XCVI. The prognoſis to be formed in this diſeaſe depends on its particular ſpecies. The malignant ſpecies is very often fatal, and has been known to appear in many places of an epidemic nature.

XCVII. The treatment of this diſeaſe depends on correcting the ſecretions of the primæ viæ, and obviating the topical affection of the part.

The firſt is generally begun with an antimonial emetic, and a few drops of the antimonial wine is preferred for this purpoſe. Abſorbents are then to be had recourſe to; and as the ſcaling takes place, purgatives, as a few grains of rhubarb, will produce their diſcharge. By a regular repetition of this plan, the diſeaſe will be removed; and, to obviate its effects, bitters may be exhibited afterwards, as a few drops of chamomile, or gentian infuſion, or tincture.

The ſecond indication, the topical treatment of the part, is executed by the application of aſtringents in various forms: the chief of theſe are the borax and diluted mineral acids, united with an aſtringent. Thus: the borax and ſugar, in the proportion of one to ſeven, is an uſeful powder: honey acidulated with elixir of vitriol, or muriatic acid, or united with borax in the proportion of ʒſſ. or ʒi. to the ℥i.; or elſe the infuſion of red roſe-leaves acidulated with mineral acids, or mixed with honey.

XCVIII. When the thruſh is of the worſt or black ſpecies, an early exhibition of antiſeptics will be proper; and the bark ſhould be employed fully for this purpoſe.

Skin-bound.

XCIX. The diſeaſe termed ſkin-bound is a peculiar affection, diſplayed in a yellowiſh white colour of ſkin, its tightneſs or fixed ſtate to the parts below, and its hard reſiſting feel, particularly on the face and extremities. To theſe ſymptoms are joined coldneſs of the child, its apparent pain, and death-like appearance.

C. This diſeaſe is uncertain in the period of its appearance, and ſhows itſelf either as an original affection, or as combined with a morbid ſtate of the bowels. It is generally fatal on the third or fourth day from birth, and ſeldom protracted beyond the ſeventh.

CI. It is more frequent in ſome countries than others; and it has particularly claimed the attention of the French phyſicians, by whom it is regularly deſcribed.

CII. The cauſes of this diſeaſe are ſomewhat uncertain: but it has been referred to an endemic ſource, and therefore chiefly appears in hoſpitals. It is very frequently fatal, unleſs the timely application of means are had recourſe to.

CIII. Diſſections of this diſeaſe ſhow conſtantly a ſerous extravaſation of a deep yellow colour, an accu-

mulation both in the liver and lungs, and affections of the lymphatic ſyſtem, particularly the glands of the meſentery.

CIV. The treatment of this diſeaſe depends on the removal of the ſpaſm, or contracted ſtate of ſurface, and reſtoring at the ſame time the health of the bowels and inteſtines. This may be moſt readily effected by the uſe of the warm bath, and friction externally, alſo bliſters; and internally by attention to the exhibition of carminative medicines, particularly the uſe of the volatile alkali, and antiſpaſmodics, calomel, or other laxatives, if neceſſary, being firſt premiſed.

CV. The rigidity in this diſeaſe exiſts in various degrees: at times it affects the ſubjacent muſcles as well as the cellular membrane: thus the lower jaw has been affected with tetanic ſymptoms. A variety of anomalous ſymptoms alſo at times take place; as the preſence of infantine eruptions, ending in gangrene of certain parts, difficulty of ſwallowing, or with extreme pain, &c.

Convulſions (Convulſiones).

CVI. The convulſions of children are generally preceded by ſlight ſymptoms of diſtortion of the face, as involuntary laughter when aſleep or awake, ſquinting of the eyes towards the noſe, or turning them upwards, the child at the ſame time changing to a blueiſh colour.

CVII. The fit itſelf is diſtinguiſhed by diſtortions more or leſs general, according to the violence of the attack. Theſe diſtortions are either of the members in ſucceſſion, or of the body all at once. They are attended with the uſual ſymptoms of foam or frothy diſcharge from the mouth, and they are terminated by profound ſleep, from which the child awakes unconſcious of its former ſtate.

CVIII. The repetition of theſe fits depends on the violence of the cauſe; and after two or three fits, on ſucceſſive days, a longer interval often takes place.

CIX. This diſeaſe is always ſymptomatic; and the particular irritations producing it are, the meconium, teething, and worms.

CX. Its attack from the firſt cauſe is generally immediately after birth; and it appears under two forms of the lock-jaw, or Triſmus Infantilis, and inward fits.

Lock-Jaw (Triſmus Infantilis).

CXI. The Triſmus Infantilis conſiſts in various degrees of rigidity affecting the under jaw, ſometimes the muſcles of the face, producing a peculiar fixedneſs of feature; and at other times extending over the neck and the whole body, with various concomitant ſymptoms.

CXII. Its appearance is generally from the ſixth to the ninth day; and it is peculiar to the children of ſome countries more than others.

CXIII. It depends on fixed ſpaſm of theſe parts, and it may be conſidered as the ſame morbid ſtate that affects the adult, only varied by the particular circumſtances of infancy.

CXIV. From its more frequent appearance in ſome countries than others, it muſt depend on ſome ſpecial cauſe there exiſting; and this cauſe we muſt naturally refer to the action of the external atmoſphere in theſe ſituations, under the circumſtances of the extreme irritability which ſucceeds birth. As the retention of the meconium, alleged by authors, frequently occurs without the attack of this diſeaſe, it does not therefore form a ſpecial or appropriate cauſe; but the irritation of the external atmoſphere, under particular combinations with which we are unacquainted, may be ſufficient for this effect.

CXV. The prognoſis to be formed of this diſeaſe is generally unfavourable, and the diſeaſe is alſo rapid in its iſſue: it is not, however, very prevalent in this country; in the warmer climates, the fatality from this affection is great.

CXVI. The treatment here, as in the adult, depends on removing irritation, and relaxing the ſpaſm.

The firſt is executed by clearing out the inteſtines from the meconium, an active ſource of irritation at this time.

The ſecond conſiſts in the uſe of the warm bath, in friction with oils, anodynes, and ſtimulants, to the part; in the application of bliſters, near the ſeat of the diſeaſe; and in the uſe of cordial and tonic remedies in-

ternally, as in the uſe of diluted ſpirits, wine, ol ſuccini, &c.

Inward Fits.

CXVII. The ſymptoms which diſtinguiſh this ſecond form of early convulſions, termed inward fits, are, a little blueneſs of the lips, ſlight turning up of the eyes, and a peculiar ſound of voice, with quick intervals of breathing.

CXVIII. Theſe ſymptoms are moſt ſevere in ſleep, when they are often attended with an appearance of ſmiling, or elſe an expreſſion of grief and pain. They are aggravated by ſucking and feeding, or by whatever produces exertion or ſurpriſe; and they gradually increaſe in violence till the actual epileptic form is aſſumed.

CXIX. The cauſes of this diſeaſe are uncertain, though the ſtate of bowels has been noticed.

CXX. The treatment conſiſts in the uſe of an emetic, ſucceeded by volatile and fœtid medicines; though this method is generally unſucceſsful in their cure.

CXXI. Theſe are the two forms of early convulſion: the laſt or proper form belongs to a more advanced period, to be afterwards conſidered.

Abdominal Complaints.

CXXII. The chief abdominal complaints that attend infancy are wind and coſtiveneſs: and theſe complaints

aſſume various ſymptoms, from ſimple griping pain and crying, drawing up the legs and ſcrotum to the height of actual ſpaſm, and convulſions.

CXXIII. Such complaints are often hereditary, and may be traced in the mother; a mark to detect their origin in the child.

CXXIV. This ſtate of the bowels, where apparently hereditary, muſt be counteracted by gentle means; and only where aſſuming a real violence of ſymptoms, is a ſtrong uſe of laxatives to be had recourſe to.

CXXV. In counteracting this morbid ſtate, three circumſtances come into review as preſent:

1. The ſlow ſtate of the bowels themſelves.
2. A tendency to the generation of wind; and,
3. A degree of morbid acidity combined with them.

CXXVI. In the choice of laxatives, therefore, to anſwer this view, abſorbents and aromatics muſt be combined; and if the coſtiveneſs, the leading indication, is removed, the tendency to the other ſymptoms muſt be prevented by a further uſe of abſorbents and aromatics, in a mild form.

CXXVII. When the morbid ſymptoms are ſo violent as to demand more immediate relief, a dry glyſter, or ſuppoſitory, made of Caſtile ſoap, mallow or beet root, is preferred; or elſe ſenna-tea, and ſome of the draſtics.

CXXVIII. Where the wind creates much pain, the

application of external heat, either dry or by fomentation, will be useful as a temporary relief.

CXXIX. Much attention is also necessary to the food in counteracting these symptoms.

Watchfulness (Pervigilia).

CXXX. Watchfulness is, on many occasions, a species of disease in infants; and arises from two causes,—abdominal complaints, or improper regulation of the sleep through the day.

CXXXI. In the first case, the chief point is to ascertain the cause; when the remedies recommended under the last disease may be employed according to the particular state of the bowels then prevalent.

In the second, its prevailing only in the night will in part demonstrate the cause, and point out the remedy.

Vomiting (Vomitus).

CXXXII. Vomiting in children is seldom an idiopathic disease; it is generally a consequence of some other morbid state.

CXXXIII. In judging of this symptom, a difference is to be made between real vomiting, and what may be termed the simple unloading of the stomach.

CXXXIV. The latter is often the attendant of health and repletion. It takes place in a very few minutes after sucking, and so soon as the gastric fluid has begun to act upon the contents of the stomach. It is accompanied with no sickness, or apparent unhealthy state,

and ſhows merely that the quantity received is too great to allow the proceſs of digeſtion to proceed, and the organ is therefore ſtimulated by it to unload itſelf of part, when its uſual operations are reſumed.

CXXXV. No particular treatment or interference is here proper; Nature herſelf removes the accumulation, and the effect ceaſes on the diſperſion of the cauſe; though ſome time ſhould elapſe before allowing the organ to be again filled.

CXXXVI. Real vomiting, then, always ſuppoſes a ſtate of diſeaſe or derangement; it is a very common complaint during the firſt and ſecond week; and this derangement depends on ſeveral cauſes, as,

1. Predominant acidity.
2. Morbid irritability.
3. Suppreſſed cuticular eruption; or,
4. Interrupted diſcharge from ſome part.

CXXXVII. With reſpect to the firſt, it is often characteriſed by the ſmell of the matter thrown up, as well as the greeniſh or clayey colour of the ſtools.

CXXXVIII. In regard to the ſecond, it is very apt to occur in very delicate puny children, or who are otherwiſe unhealthy.

CXXXIX. The ſudden ſuppreſſion of any eruption is always attended with an affection of ſtomach, often ſucceeded by general fever; and in the ſame way, when any diſcharge has prevailed, its diſappearance is apt to be followed by the ſame ſymptoms.

CXL. In counteracting, then, this morbid ſtate, the particular cauſes of it are to be had in view.

CXLI. In the firſt caſe, the uſe of abſorbents and alkalis are particularly indicated, as the teſtaceous powders, magneſia, the aqua kali, or ſoap.

CXLII. Myrrh alſo has been found an uſeful remedy.

CXLIII. In the ſecond, tonics and aromatics form the proper remedies; as an infuſion of bark, or of chamomile, with the junction of ginger, orange-peel, or a little rhubarb; and occaſionally an anodyne.

CXLIV. The ſame remedies alſo, in the form of external application to the region of the ſtomach, as an aromatic fomentation, or the emplaſt. ladani, with theraica, may be attempted.

CXLV. In all caſes of vomiting, the exiſtence of hernia ſhould be inveſtigated.

Inflammation of Stomach (Gaſtritis Infantum).

CXLVI. The gaſtritis infantum is a rare diſeaſe, and diſtinguiſhed by great pain in the region of the ſtomach, very frequent in its recurrence, and marked by violent contortions or writhings, and the application of the child's hand to the part.

CXLVII. When it occurs, it is generally in ſum-

mer. During its continuance nothing is retained, but immediately rejected. It is not, however, ſo fatal in children as in adults.

CXLVIII. The treatment conſiſts in the uſe of cooling and laxative remedies, as the caſtor oil, lettuce-juice, &c.; but, where ſymptoms are very violent, external fomentations, the warm bath, or a bliſter to the part, may be attempted.

Gripes (Tormina).

CXLIX. Gripes are always the attendant of wind, coſtiveneſs, or diarrhœa; and therefore entirely ſymptomatic. Their treatment cannot be diſjoined from that of the primary affection with which they are connected. Alteration of poſture, ſo as to keep the child upright, is frequently an alleviation of their violence.

Looſeneſs (Diarrhœa).

CL. Diarrhœa is one of the moſt frequent complaints of infancy; and one which, unleſs ſevere, is hardly to be conſidered in children as a real morbid ſtate. By it, nature, with them, moſt commonly throws off any offending cauſe. Its cauſes, therefore, and treatment, require very particular attention.

CLI. The general treatment of this complaint conſiſts in firſt removing, as far as poſſible, the of-

fending matter, and then checking the particular ſymptoms.

CLII. The firſt of theſe is effected by the exhibition of an emetic, where the offending cauſe appears lodged in the ſtomach; and afterwards by the uſe of rhubarb and abſorbents. The extent and continuance of this plan muſt depend on the obſtinacy of the complaint. To theſe medicines opiates muſt be occaſionally added, according as particularly indicated by pain and irritation. In fixing the doſe of opiates with reſpect to children, ſome nicety is required; though, in general, they bear them proportionally better than adults.

CLIII. The particular nature of the diarrhœa is to be often drawn from the appearance of the ſtools, and the treatment to be regulated from that circumſtance. Thus, when the ſtools are ſour and curdled, and the ſymptom of hiccup occaſionally attends, the propriety of abſorbents, joined with aromatics, is ſtrongly pointed out, as the magneſia, with a little nutmeg.

CLIV. When, again, the ſtools are ſlimy, and green or white, and of a clayey colour, alkalis may be added to the former plan, as the aqua kali, or a little diſſolved ſoap, in clyſter.

CLV. When the ſtools are watery and bloody, or at times fœtid, the exhibition of a powerful purgative ſhould precede the other treatment; and, if attended with much griping, cordials, and clyſters of warm milk, may be alſo repeated.

CLVI. Beſides this internal treatment, external applications are had recourſe to as an auxiliary aſſiſtance. Theſe conſiſt of fomentations with brandy, with chamomile-flowers, white poppy-heads, &c.

CLVII. Two particular ſpecies of diarrhœa claim a ſpecial conſideration: theſe are the *dentile*, and what are termed *watery gripes*.

CLVIII. The *dentile* ſpecies, or from teething, is frequently attended with pale ſtools, curdled and watery; and is moſt ſevere on cutting the double teeth. It is alſo accompanied with fever, which increaſes if the complaint is ſtopped.

CLIX. As it is here the effect of a general irritation of the ſyſtem, not eſpecially confined to the bowels, the indications pointed out are, to take off this general irritation by frequent purging, and more certainly where the parts are in a proper ſtate, by the diviſion of the protruding teeth, thus removing the primary cauſe. To this treatment, ſhould ſymptoms of predominant acidity appear, a ſlight addition of alkalis, as the aqua kali, or ſp. ammoniæ comp. may be joined.

CLX. Where no immediate protruſion, however, is expected, this treatment requires ſome limitation, and an intermediate uſe of cordials will be proper; but this muſt be regulated, as well as the degree of purging, by the ſtate of the irritation, and the ſtrength of the patient.

CLXI. The other ſpecies of diarrhœa, or the true

watery gripes, may be conſidered as a ſpecies of lientery. It is marked by thin watery ſtools, ſo frequent, that every thing taken immediately runs through the child, and often of a dark fœtid colour. The period of its attack is various; often, in ſmall delicate infants, within the month: at other times it ſucceeds ſome previous illneſs, and in other caſes is merely accidental. The ſymptoms all increaſe in violence as it advances; and, from its rapid effects, it requires immediate attention.

CLXII. For the treatment of this diſeaſe, the evacuation of the primæ viæ is a previous and indiſpenſable ſtep: an emetic ſhould therefore be given in divided doſes, ſo as to have a full operation; and theſe doſes repeated at a proper diſtance from each other, as ten minutes or a quarter of an hour. The emetic is to be ſucceeded by a warm laxative, as the rhubarb, with ſome aromatic. After the primæ viæ are thus cleared, the further removal of the complaint is to be truſted to ſmall doſes of ipecacuanha or antimony, combined with abſorbents and aromatics.

CLXIII. Where the diſeaſe, however, reſiſts this treatment, and a predominant acidity ſeems to attend, this is to be ſtudiouſly corrected by large doſes of abſorbents and alkalies, as the aqua kali, tinct. of myrrh, or ſuccinated ſp. of ammonia, which may be even premiſed by a repetition of the emetic.

CLXIV. When this predominant acidity is corrected, if the diarrhœa ſtill continue, opiates and aſtringents will be then proper, as the chalk julap, with laudanum and aromatics, or the logwood decoction.

CLXV. Beſides this internal treatment, the application of aromatic plaſters to the abdomen is common as an auxiliary remedy.

CLXVI. In the treatment of all abdominal complaints of children, much attention is neceſſary to the nature and kind of the food or nouriſhment taken.

CLXVII. The food of children, with this view, ſhould be deprived of acid as much as poſſible: hence, inſtead of milk, animal food, in the form of thin beef-tea or mutton-broth, is preferable; and bread, deprived as much as poſſible of a tendency to aſceſcency by previous fermentation. The beſt kind for this purpoſe is the ruſk and French roll, or flour baked in an oven till it breaks into a powder, and afterwards made up with boiled milk Powder of arrow-root and tapioca may be likewiſe uſed in the ſame way. Indeed it is proper to alternate the food occaſionally from one kind to another, and frequently to exhibit the animal food in a ſolid form, when the ſtomach rejects fluid nouriſhment.

CLXVIII. The change of the wet nurſe, alſo, makes often a neceſſary part of the treatment.

CLXIX. This morbid ſtate of the bowels deſcribed is frequently attended with cutaneous eruptions. It is always a favourable ſymptom, and produces a relief of the moſt urgent ſymptoms.

Incontinence of Stools.

CLXX. A conſequence of long-continued diarrhœa is frequently an incontinence, or want of retention of the alvine diſcharge. This complaint is temporary, and departs as ſtrength is acquired. Cold affuſion of the parts may be uſed as a temporary expedient.

Worms (Vermes).

CLXXI. From this affection no part of the body is excepted, as worms have been found in the heart itſelf: nor is any period of life confined to their generation, for they have been met with in the fœtus as well as in the moſt advanced age.

CLXXII. No diſeaſe is more frequent than this in early childhood, and its preſence is not always decided by morbid ſymptoms; ſo that the actual paſſing of them is at times the ſole indication of the diſeaſe. But, for the moſt part, morbid ſymptoms attend; and thoſe enumerated as moſt commonly diſtinguiſhing them are what we have deſcribed in vol. I. p. 203, viz. pain and acid eructation of ſtomach, variable appetite, foul tongue, fœtid breath: the belly full, hard, and tenſe, with occaſional gripings or pains in different parts of it, particularly about the navel; irregular ſtate of the belly, heat and itchineſs of the rectum, urine white and limpid, often diſcharged with difficulty.—With theſe ſymptoms are joined a dull appearance of the eye, often dilation of the pupil, itchineſs of the noſtrils, ſhort dry cough,

ſlow fever, with evening exacerbations, and irregular pulſe, grinding of the teeth in ſleep, &c.

CLXXIII. The cauſe of worms we formerly noticed as uncertain; and their exiſtence in every part of the body, and alſo before birth, ſhows that a diſpoſition prevails in the human body to their generation, under certain circumſtances; and this diſpoſition prevails independent of the preſence of any external cauſe favouring it.

CLXXIV. This diſpoſition in the human body ſeems favoured by a certain laxity, or moiſture, particularly of the primæ viæ. Hence the frequency of the diſeaſe in childhood.

CLXXV. The prognoſis to be formed in caſe of worms depends much on their particular ſpecies, and alſo on their degree of irritation.

CLXXVI. The ſpecies of worms met with are of four different kinds: the teres or round worm, which generally occupies the higher parts of the inteſtines; the aſcarides, or maw-worms, which occupy the lower; the cucurbitina, or ſhort flat worm; and the tænia, or tape-worm. Of theſe the moſt dangerous is the tænia; but it is ſeldom met with in childhood.

CLXXVII. The morbid effects ariſing from the preſence of worms depend on deprivation of nouriſhment, irritation of parts, leſion of ſubſtance.

CLXXVIII. For the cure of worms two indications ariſe:

1. To effect their expulsion; and,
2. To prevent their generation.

CLXXIX. Their expulsion is attempted in three different ways:

1. By simple evacuation or purging; and the remedies with this view are various, as senna, scammony, and calomel: rhubarb, and calx of antimony; Æthiop's mineral and calomel; valerian, and jalap; the different fœtid or strong bitters, as rue, tansy, &c.

2. By mechanically dislodging them from their seat by oils, as the olive and castor oil; by the amalgam of tin and quicksilver; by coweech; by pewter-filings, &c.

3. By chemically destroying them, as by lime-water, by volatile alkaline salts, by decoction of quicksilver water, &c.

CLXXX. The future generation of worms is prevented by strengthening the tone of the bowels, and obviating the accumulation of mucus. This is done by the use of tonics, and the particular choice of diet.

CLXXXI. The tonics most employed are those of the astringent kind, particularly the steel, in the form of the rust, or as a chalybeate water, joined with some bitters.

CLXXXII. External applications have also been had recourse to for the removal of this complaint. These consist of plasters with aloes, and turpentine, with aloes and rue, liniments of aloes and gall, &c.

CLXXXIII. The diet of children, as a preventative

of worms, ſhould be regulated ſo as to avoid all fat and greaſy articles. Food of eaſy digeſtion, and having rather an alkaleſcent tendency, ſhould be preferred.

Convulſions (Convulſiones).

CLXXXIV. We have already noticed two forms of this complaint, which attack the firſt weeks of exiſtence (p. 44 and 46): we now examine that form which injures the more advanced period.

CLXXXV. Its appearance differs nothing from that which attacks the adult. The body becomes either convulſed all at once, or the limbs; the jaws are locked, and the mouth filled with ſlime. In this ſtate the child continues till ſleep ſupervenes, from which it awakes pretty well, till the ſame appearances are renewed at intervals of various diſtance. It is divided into two ſpecies, the ſymptomatic and idiopathic.

CLXXXVI. Four cauſes of the ſymptomatic convulſion may be remarked:

The 1ſt is commonly ſeated in the primæ viæ, and conſiſts in the aliment being converted into a thick viſcid paſte, adhering to the inteſtines, and not conveying a proper nouriſhment.

The 2d ariſes from the irritation of teething.

The 3d from the diſappearance of a cuticular eruption or diſcharge; and

The 4th from worms.

CLXXXVII. The preventative treatment of convul-

ſions from the firſt cauſe will depend on giving a nouriſhment as little adheſive as poſſible, and alſo preventing any accumulation of viſcid matter in the primæ viæ, where a diſpoſition prevails to form it.

CLXXXVIII. The firſt intention is anſwered by avoiding the farinacea as much as poſſible, particularly meal-pap, and giving in its place thin animal ſoup, as veal-tea and milk.

CLXXXIX. The ſecond purpoſe is effected by the uſe of laxatives, as the caſtor-oil, occaſionally repeated, with cordials interpoſed to prevent debility from its operation.

CXC. This cauſe of convulſions will generally be diſcovered by the previous ſymptoms, as the child being affected with loathings, coſtiveneſs, purging, by its pale countenance, large belly, and diſturbed ſleep.

CXCI. Where much irritability prevails, independent of the irritation of the primæ viæ, a vitiated atmoſphere, want of cleanlineſs, and many other ſimilar cauſes, are ſufficient to induce this affection.

CXCII. Convulſions from the ſecond cauſe mentioned, or teething, are eaſy to be removed by taking off the irritation by a diviſion of the affected gum, or ſcarification; of which a more ample detail will be given under that head.

CXCIII. Convulſions from the third cauſe, or retropelled eruption, by a raſh diſappearing, or diſcharge drying up behind the ears, requires the uſe of the warm

bath, and every means of returning the eruption, or ſoliciting the diſcharge by bliſters, &c.

CXCIV. We have thus conſidered the firſt ſpecies of convulſion, or the ſymptomatic. It more frequently occurs than the ſecond, or idiopathic, which comes on without any previous ſymptom to account for it.

CXCV. Its effects are generally more formidable than the ſymptomatic; and, if recurring, this ſpecies is apt to be ſucceeded by the loſs of the ſenſes of ſight or hearing, or a general injury of the intellects.

CXCVI. The treatment here requires the moſt active means, as removing general irritation by bleeding and bliſters, and alſo attending to the ſtate of the primæ viæ; after which, the uſe of antiſpaſmodics will be proper.

CXCVII. Bleeding is beſt performed by leeches, as one or two on the foot, or behind the ears, which may be repeated once or twice. The bliſters ſhould be applied to the head, that is, as near as poſſible to the principal ſeat of the affection. The ſtate of the primæ viæ ſhould be kept looſe by a proper uſe of laxatives; and, theſe means being premiſed, the antiſpaſmodics employed may be, tincture of ſoot or of caſtor, ſp. of hartſhorn, liquid laudanum, oil of rue, muſk, ſpermaceti, and oil of aniſe; the muſk has been particularly recommended by ſome authors.

CXCVIII. The uſe of external antiſpaſmodics is likewiſe a common practice, as oil of amber or water

of ammonia, applied to the back-bone, palms of the hands, and ſoles of the feet.

CXCIX. When convulſions, from their frequent repetition, aſſume ſomething of a chronic form, iſſues, or ſetons and chalybeates, become the proper mode of treatment.

CC. In the treatment of all convulſions, much depends on being able to make the proper diſtinction when they are of an idiopathic or ſymptomatic nature, that is, to aſcertain their cauſe.

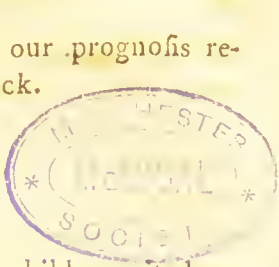
CCI. One particular cauſe of convulſions requires to be mentioned, which is ſimply over-diſtenſion, the ſtomach being ſuddenly filled with an exceſſive quantity of nouriſhment. Whenever, therefore, a convulſion ſuddenly comes on, and immediately after feeding or ſucking, this cauſe may be ſuſpected, and the oppreſſion of the organ is to be taken off by unloading it of its contents, either by irritation of the throat with a feather or finger, or by the immediate exhibition of an emetic.

CCII. When the cauſe is thus removed, the effect generally ceaſes.

CCIII. In ſome caſes, alſo, convulſions appear as an effort of nature, either in uſhering in, or giving a criſis to, certain diſeaſes. Their treatment, therefore, muſt be guarded till their cauſe is aſcertained.

CCIV. In forming our opinion on convulſions, the frequency of their recurrence, and the violence of

the fits where repeated, determines our prognosis respecting the actual danger of the attack.



Palsy (Paralysis).

CCV. Palsy is a rare disease in children: it does, however, occur at times, and that in different degrees, the same as in adults.

CCVI. Its attacks extend to different parts of the body, being sometimes confined to the upper, sometimes to the lower extremities; but its most common form is that of hemiplegia.

CCVII. The morbid effect produced by it is also in various degrees, from simple weakness of the limbs to a total abolition of their use.

CCVIII. The period of its attack is uncertain: it has been known so early as three days from birth, but in general it occurs at a more advanced period.

CCIX. The prognosis is here more favourable than in adults; but if not soon relieved, that is, in a few months, the disease becomes chronic, and, though life is dragged on, the patient seldom arrives at manhood.

CCX. The treatment of palsy in infancy depends much on exciting the proper action of the primæ viæ, where the cause of the complaint is generally seated. For this purpose brisk purging is proper as a

leading indication. Blifters and external ſtimulants become alſo a neceſſary part of the cure; and, theſe means being premiſed, antiſpaſmodics may be then conjoined, as the valerian, caſtor, prepared ammonia, æther, &c.

Electricity alſo may be attempted.

CCXI. This diſeaſe is often dependent on, or connected with, hydrocephalus; in which caſe, the ſame being once aſcertained, the treatment proper for this primary affection becomes neceſſary, particularly mercury and diuretics, in preference to any other.

Epilepſy (Epilepſia).

CCXII. Epilepſy we formerly conſidered in a general way, (in vol. I. p. 72,) and alſo in this volume, under the forms of inward fits and tetanic ſpaſm, as occurring ſoon after birth; but, when further advanced, it appears in children under the proper epileptic paroxyſm or fit.

CCXIII. This form conſiſts in the child ſuddenly and unconſciouſly falling down, when convulſion takes place, either with or without the loſs of the ſenſes.

CCXIV. The cauſes of this diſeaſe we referred to three ſpecies of irritation, to which a fourth may be added, as the irritation on particular glands towards the age of puberty.

CCXV. The progreſs of this affection is generally

ſuſpended by this period of life; and, where it is not, there is very little expectation of a cure during the remainder of it.

CCXVI. Diſſections of this diſeaſe, where fatal in children, ſhows always one of two morbid alterations, either a collection of water in the ventricles of the brain, or a ſmall ſharp point of bone projecting from the internal ſurface of the os frontis or ſella turcica.

CCXVII. The treatment of this affection in children is to be attempted chiefly by

1. Removing abdominal irritation; and,
2. The uſe of tonics and antiſpaſmodics.

CCXVIII. The firſt is performed by a proper exhibition of laxatives.

CCXIX. The ſecond conſiſts in the bark, chalybeates, and cold bathing; or in the uſe of opium, valerian, ol ſuccini, muſk, and other antiſpaſmodics; not even omitting, where the caſe is obſtinate, electricity.

CCXX. External irritation alſo, with bliſters, is in ſome caſes, towards the age of puberty, uſeful.

St. Vitus's Dance (Chorea.)

CCXXI. This diſeaſe was treated of in vol. I. p. 78. It conſiſts in partial convulſions, or continual motion

of the extremities of one ſide, as there deſcribed, ſeldom extending its attacks beyond the fifteenth year. Its cauſes are, generally, predominant irritation in the primæ viæ, of various kinds, or elſe general relaxation of the ſyſtem.

CCXXII. Attention, therefore, to the particular irritation, in the firſt paſſages, ſhould precede every other attempt at a cure, by alteratives and purges; and, when this is found inſufficient, tonics are then indicated, as the bark, chalybeates, and cold bathing. Sometimes, exciting a more powerful irritation, by electricity or dry cupping, has ſucceeded.

Night-mare (Incubus).

CCXXIII. Night-mare is an affection well known: it conſiſts in a ſenſe of oppreſſion, weight, and tendency to ſuffocation, varying in its period of duration, and alſo in the degree to which it attains. It is an affection common to children as well as adults; and it can hardly be termed a diſeaſe, as they frequently outgrow it.—The fit, however ſhort in duration, always leaves ſome unpleaſant effects, as lightneſs of head, tremor, and anxiety; but theſe are merely temporary.

CCXXIV. The cauſes of this complaint are ſomewhat obſcure. Spaſm of the cheſt certainly takes place; and the flatulence and indigeſtion which prevail in it are merely concomitant ſymptoms. It is alſo frequently connected with the circumſtances of growth, as it is known to depart after the age of puberty. Its cauſes,

however, are commonly referred to flatulence and indigeſtion, exciting ſpaſm of the diaphragm and muſcles of the cheſt, the ſtricture of which occaſions the dread and ſenſe of ſuffocation.

CCXXV. The treatment depends on rouſing the patient by the uſe of volatiles or fœtids, ſo as to terminate the fit; and afterwards to prevent its recurrence by attention to the ſtate of the firſt paſſages.

CCXXVI. Particular food will be more apt to excite this irritation than others; and the propriety of abſtinence, in regard to ſupper, is therefore pointed out. The uſe of tonics, in general, will render the patient leſs liable to be affected by ſpaſm of any kind. Hence its prevention depends on proper diet, and the uſe of cold bathing.

Temporary Loſs of Speech (Aphonia).

CCXXVII. Temporary loſs of ſpeech, or a difficulty in utterance, is frequent with ſome children, from the fourth to the ſeventh year. It forms in its attack only a temporary inconvenience, ſeldom exceeding a quarter of an hour at a time.

CCXXVIII. It depends probably on the ſame cauſe as the other convulſive affections during this period, and attention is always to be paid to trace the particular irritation to which it may be referred, as this points out ſomewhat the means of relief.

CCXXIX. The treatment conſiſts in the uſe of local ſtimulants to the part during the period of the fit, as an infuſion of lavender or mint, or elſe a decoction of pellitory; and, in the interval, applications to invigorate the ſyſtem in general, and prevent its recurrence.

Excoriations of Skin.

CCXXX. Excoriations of different parts of the cuticular ſurface, either from its delicacy or particular cauſes of irritation, is a common complaint of children; but the part moſt liable to this, and requiring often a ſpecial treatment, is behind the ears.

CCXXXI. The chief ſources of irritation producing this complaint are thoſe of the bowels and teething; in both which caſes it is conſidered as an effort of nature to relieve the irritating cauſe.

CCXXXII. It is divided into two ſpecies, varying only in degree.

CCXXXIII. In the firſt or ſimple excoriation, little is neceſſary in the treatment but cold waſhing, and the application of a mild aſtringent to the part, as a bit of ſinged rag, which is the popular remedy.

CCXXXIV. In the ſecond ſpecies, when it paſſes into ulceration, and this ulceration ſpreads rapidly and gets dry, with a foul appearance and painful ſtate of the ſore, the indications then pointed out are,

1. To relieve the part by a neighbouring irritation, or the application of a bliſter to the neck; and,

2. To diſpoſe it to heal by abating pain by the uſe of anodyne fomentations, and exciting the tendency to re-union by ſome mild mercurial liniment, particularly that with a proportion of calomel.

CCXXXV. To aſſiſt this treatment, ſome gentle alterative may be adminiſtered internally, conſiſting of any mild combination of ☿ and antimony, or of ☿ and ſulphur, or the calomel and cinnabar of antimony, or Æthiop's mineral.

CCXXXVI. When this ſpecies of ulcer ſhows, as ſometimes happens, a tendency to mortification, the bark is then indicated to be uſed externally in the form of fomentation, and alſo internally in ſuch quantity as the age of the patient admits.

Auricular Abſceſs.

CCXXXVII. Matter diſcharged from the ears in various quantities, and alſo with various appearances of inflammation, both in degree and extent, are common to childhood.

CCXXXVIII. Such complaints are moſt frequently the attendant of a ſcrofulous conſtitution.

CCXXXIX. It is generally treated as a common inflammation, by the uſe of laxatives, and attention to the diſcharge of the matter, by the poſition of the child

when in a recumbent poſture. Where this is not ſufficient, deterſive injections are then employed, conſiſting of ſome mild aſtringent waſh; and, failing of theſe means, ſome warmer ſtimulant is then applied, of which a detail is given, vol. I. p. 218, and vol. II. p. 213, under the article Deafneſs.

CCXL. When the diſeaſe appears to reſiſt this treatment, an iſſue may be opened near the ſeat of it, or the nape of the neck, mild mercurials internally exhibited, and fumigation with ſulphurated ☿ applied to the part.

Fevers (Febres).

CCXLI. The extremes of age are generally experienced leſs diſpoſed to the attack of proper fever; and hence old people and children often eſcape in the moſt virulent ſtages of febrile contagion. An infant will often continue to ſuck, during the progreſs of the malady, its diſeaſed parent, to the laſt minute of exiſtence, and remain afterwards untainted by infection. It is the prime of life, the flos juvencæ, that is the victim of this diſeaſe.

CCXLII. The fevers of children, therefore, ariſe only from the cauſes already diſcuſſed, viz. teething, diſorders of the primæ viæ, glandular affections, cutaneous diſeaſes, ſpecific contagions peculiar to this period of life, or ſimply the application of cold. It is the conſideration of this laſt, therefore, that claims our attention.

Catarrhal Fever (Febris Catarrhalis).

CCXLIII. This fever, or more properly catarrh, is diſtinguiſhed by cough, hoarſeneſs, and difficulty of breathing, with affection of the noſe and eyes, only varying from the catarrh in the adult by the violence of its ſymptoms.

CCXLIV. Its treatment, therefore, in infancy, requires more attention to counteract this violence, by leſſening the irritation on the breaſt by a bliſter or blood-letting. A bliſter may, therefore, be applied to the region of the ſtomach; and, if not effectual in the relief procured, may be ſucceeded by a leech or two on the foot, as the moſt convenient ſituation. Along with this, when there is much phlegm, an emetic may be exhibited; and, after its operation, oily medicines had recourſe to, to quiet the irritation of the cough. The bowels are to be kept looſe by ſmall doſes of antimonials, or elſe by common laxatives.

Stomachic Fever.

CCXLV. Where the fever does not partake of this catarrhal form deſcribed, or where difficulty of breathing prevails without a correſponding degree of fever, it is moſt probably connected with, or dependent on, irritation of the ſtomach, and accumulation of bile may exiſt as its cauſe. The ſtate of the ſtomach, therefore, forms here the leading indication; and ſhould precede every other treatment, an emetic being exhibited for its evacuation.

Inteſtinal Fever.

CCXLVI. In the ſame way accumulation in the inteſtines may produce a ſimilar morbid ſtate; and when the emetic is not fully effectual, or relieves only in part, laxatives and the teſtacea may be alſo given; or, ſhould a partial alleviation only attend this plan, more powerful purgatives are then pointed out, as the caſtor oil, and compound ſcammony powder, or calomel.

CCXLVII. From the glutinous tendency in the excretions of the bowels of infants, this cauſe of accumulation ſhould always be looked to, and every attack of febrile ſymptoms ſhould be ſuſpected as connected with it, the treatment of which will often prove ſucceſsful in affording relief.

CCXLVIII. When the progreſs of the fever reſiſts this treatment, ſaline draughts are then to be had recourſe to, ſimply, or combined with the vinum antimonii; by a due perſeverance in which the diſeaſe will come to be removed, or at leaſt ſo far mitigated as to yield to the uſe of the bark, which ſhould then be exhibited in a light decoction.

CCXLIX. Theſe fevers in infants are often ſucceeded by peculiar conſequences not ſo common in adults, and which may be termed a ſort of ſecondary affection.

Consequences of Fever.

Cutaneous Eruption.

CCL. The first to be noticed is a cutaneous eruption in the form of the red-gum or of the thrush. The former is to be considered always as a favourable symptom, but at the same time a mark of the violence of the preceding fever: the latter, or thrush, when appearing, is rather to be regarded as an unpropitious appearance, and often fatal in its consequences.

Cervical Pain and Tumor.

CCLI. The second consequence of preceding fever in infants is pain, swelling, and stiffness of the neck, often drawing the head to one side. This affection requires the application of heat and embrocations, to which it soon yields.

Intermittent Fever (Febris Intermittens).

CCLII. The ague is not a disease very frequent in childhood. In particular situations, however, it does occur, and its consideration is therefore proper here.

CCLIII. Its symptoms are the same as in the adult, consisting in a regular succession of cold, hot, and sweating fits, with the intermission of a certain period before their repetition; and this intermission is chiefly distinguished by a high-coloured urine, with a laterious or red sediment.

CCLIV. The periods of the ſeaſon moſt common for the attack of this fever is ſpring and autumn; and the form it appears in, in this climate, is the tertian, or that which gives an intermiſſion of 48 hours between the paroxyſms.

CCLV. Children, within the year, have been known to be the ſubjects of it; and wherever general, in any ſituation, infancy never eſcapes its attack: a circumſtance in which it differs from other ſpecies of contagion.

CCLVI. The prognoſis in this diſeaſe is always favourable; and, when obſtinate, it has been known to yield to the attack of another diſeaſe, particularly the ſmall-pox; a proof its contagion is of a debilitating nature.

CCLVII. The cauſe of intermittent fever is clearly one ſource, marſh miaſma, or that ariſing from a low damp ſituation, acted on by heat; but in infancy the diſeaſe is often combined with diſorder of the primæ viæ, frequently with worms, or elſe with obſtructed biliary ſecretion.

CCLVIII. The ſpecific for this diſeaſe in adults is the bark; but in infants it is difficult to employ it. Hence the cure is more uncertain; and the treatment, therefore, requires to be more varied.

CCLIX. It is generally, as in other caſes, premiſed by an antimonial emetic. This is ſucceeded by ſmall doſes of James's powder during the period of fever, and purges of rhubarb and calomel during the intermiſſions.

or; inſtead of this, ſaline draughts are repeated every ſix or ſeven hours; or diaphoretics, as the crude ſal ammoniac in a few grains, myrrh, and cream of tartar, or aromatics.

CCLX. When the bark is employed at this early period, it is often quilted in a waiſtcoat, worn next the ſkin, or applied in a large poultice folded up in thin linen or gauze; and applied warm on the region of the ſtomach, being occaſionally renewed. When given internally to infants, it ſhould never be on an empty ſtomach.

The remedies for this diſeaſe, invented by ignorance or ſuperſtition, are numerous. Thus whatever can be conceived diſagreeable to the taſte or appearance has been occaſionally employed, and whatever, by its poignancy or ſtimulus, can excite the action of the ſyſtem. Hence ſpiders' web in wine, pepper and alum, flour of ſulphur and brandy, and a thouſand others, have been held up as ſpecifics.

CCLXI. In infancy the ague-cake, or obſtruction of the liver, is not ſo frequent a conſequence of the diſeaſe as in adults. When occurring, it yields to the uſe of calomel and bitters.

General Remarks on Infantine Fevers.

CCLXII. Firſt, Moſt of the fevers of infancy poſſeſs an inflammatory tendency, or reſemble ſynocha; they are, therefore, acute, and of ſhort duration.

CCLXIII. Second, Wherever a fever is protracted in infants, it aſſumes the remittent form.

CCLXIV. Third, The fevers of children moſt commonly ariſe from ſlight accidental cauſes, either connected with the primæ viæ or the ſtate of the ſkin. In their treatment theſe cauſes are always to be had in view, and the clearing the firſt paſſages, and producing a free determination to the ſkin, are the chief objects to be regarded.

Dentition (Dentitio).

CCLXV. Teething is the moſt critical period of infancy. During it the fatality is reckoned at one-tenth of the ſpecies, and its morbid effects depend much on the ſtate of the ſyſtem with reſpect to its tendency to inflammation. This ſubject we already conſidered in vol. II. p. 41, in a curſory manner: we ſhall now conſider it more minutely here.

CCLXVI. The period when infantine dentition is complete is three years; from ſix months, therefore, to that period, the conſtitution ſuffers from a conſtant irritating cauſe acting upon it. Its ſufferings, however, will depend much on the interval which occurs between the ſucceſſive protruſion of the teeth. This varies conſiderably in different children, and alſo in the ſame child, from different circumſtances in the teeth themſelves, extending ſometimes from a month or leſs to half a year, and ſo on.

CCLXVII. The general prognoſis formed in dentition is, that the extremes of health and debility are equally

dangerous during the eruption; for, ſtout children and irritable weak ones both ſuffer alike from it. Dentition is alſo eaſier in winter than in ſummer; fat children are more affected by it than lean; and the occurrence of diarrhœa is always a favourable ſymptom.

CCLXVIII. The commencement of dentition varies alſo in different children. In ſtout ones it appears ſooneſt; but in the weak and ricketty it is often protracted to a late period, even the length of two years, before any appearance takes place.

CCLXIX. In the progreſs of dentition the two front teeth in the lower jaw are commonly cut firſt, the one following the other at the diſtance of fifteen days. The large ones of the upper jaw appear ſoon after, ſometimes at the ſame time. A conſiderable period then elapſes, till the eye-teeth appear, one on each ſide, ſucceſſively; the reſt of the canini follow; and, laſt of all, the molares. This proceſs, however, is by no means ſo regular,—a protruſion of teeth frequently occur all at once: in other caſes the ſmall molares frequently appear before the canini, and the latter again before the eye-teeth.

CCLXX. In regard to the different figure of the teeth influencing their protruſion, it may be obſerved, that the molares, from their bluntneſs, are attended with moſt conſiderable irritation, and that diarrhœa always marks their cutting; that the canini are next to them, from their middle being the thickeſt part; and that the inciſores give leaſt pain, from their ſharp point allowing the whole tooth to paſs.

CCLXXI. From the fourth month every cauſe of indiſpoſition affecting the child is generally referred to the head of dentition; but thoſe ſymptoms which more eſpecially diſtinguiſh it are:

1. A tendency to drivel or ſlaver much, with ſtarting, and thruſting the fingers into the mouth.

2. Expanſion, heat, and ſwelling of gum.

3. A circumſcribed red or hectic fluſh on the cheek.

4. Eruptions on the face and ſcalp.

5. Diarrhœa, with its uſual irritation, or griping and morbid ſtools.

6. Spaſms, and general irritation of the nervous ſyſtem, preventing ſleep.

7. Alteration in the ſecretion and appearance of the urine; and,

8. Sometimes ſwelling of the extremities, though rare.

CCLXXII. From this view of the common progreſs of dentition, and its attendant ſymptoms, it is proper to conſider the treatment the latter require when ſo violent as to form a real morbid ſtate.

CCLXXIII. The cauſes which influence them in their violence are:

1. The degree of action in the ſource of irritation, or in the protruding teeth.

2. The irritability of the ſyſtem; and,

3. The preſence of other affections at the ſame time.

CCLXXIV. The conſtitutional ſymptoms to which theſe cauſes give origin are chiefly fever and convulſions.

Dentile Fever.

CCLXXV. The fever here is to be treated on the ſame plan as the ſynocha or inflammatory ſpecies. Bleeding with a leech or two behind the ears will be occaſionally proper; but this evacuation, with children, requires much reſtriction.

CCLXXVI. Diarrhœa is a ſymptom always favourable, and ſhould therefore be kept up in a moderate degree; or, if coſtiveneſs prevails, it ſhould be even excited by the uſual means of laxatives.

CCLXXVII. Dilution, when ſucking is not permitted, ſhould be particularly attended to, and ſmall quantities of light food only given at a time, as the action of the ſtomach is generally ſomewhat impaired, and digeſtion imperfect.

CCLXXVIII. In retention of urine during this period glyſters are neceſſary; but the warm bath is ſtill more uſeful. Antimonials, which preſerve diarrhœa, and likewiſe act on the ſkin, are here proper auxiliaries.

CCLXXIX. As directing ſomewhat the propriety of the treatment, the exiſtence of a diarrhœa and cutaneous eruption, it may be remarked, always give dentition a favourable and mild termination.

CCLXXX. This diarrhœa often occurs ſpontaneouſly during dentition, to a violent degree, and for a long continuance. During this period, however, the conſtitution of the child wonderfully ſupports it; and that continued action of the irritating cauſe gives a temporary vigour, which enables the child ſoon to recover it.

CCLXXXI. When very violent, however, it may be reſtrained by a moderate uſe of the teſtacea, with the contrayerva powder, or a ſmall proportion of an antimonial, as the James's powder; or by a doſe of the diluted compound ſpirit of ammonia, or even a drop or two of laudanum. But, though moderated, it ſhould never be entirely ſtopped.

CCLXXXII. But, beſides the bowels, the irritation of dentition is, at times, alſo extended to the lungs, aſſuming the form of peripneumony; and it is during the cutting of the canine teeth that this form is apt to appear.

CCLXXXIII. The treatment here does not vary from that already recommended, viz. the promotion of diarrhœa; but beſides this, from the alarming nature of the ſymptoms, particular attention is neceſſary to remove the local irritation or cauſe, by aſſiſting the protruſion of the teeth in the manner afterwards directed.

CCLXXXIV. This, then, forms the uſual treatment of the firſt and moſt general morbid ſtate attending dentition; we are now to examine the other, or the attack of convulſions.

Dentile Convulſions.

CCLXXXV. Dentile convulſions are preceded by uncommon ſtarting in ſleep. Their diſtortions are more confined to the muſcles of the face than the extremities; and they are often preceded by a hoop or catch in the breath.

CCLXXXVI. The irritation being then ſtrongeſt, they are moſt apt to occur on the teeth cutting the perioſtæum,

which, more than the other parts of the gum, reſiſts their protruſion.

CCLXXXVII. Beſides the general management already detailed for the treatment of fever, the local means here demand particular attention. Theſe local means conſiſt in the application of bliſters behind the ears or to the back; but the moſt certain relief is experienced from the diviſion of the gum, and removing the cauſe of irritation by the operation of ſcarification.

CCLXXXVIII. Wherever ſymptoms of dentition produce the morbid ſymptoms deſcribed this operation ſhould never be omitted; it ſhould be begun early, and ſhould be occaſionally repeated, according to the urgency of ſymptoms; and it ſhould never be entirely given up, but on the complete protruſion of the teeth.

CCLXXXIX. Pain and fever often ariſe from the firſt appearance of dentition; and in theſe caſes, though no protruſion can be expected for weeks, ſtill the operation will give conſiderable relief, and the diſcharge of blood in this way will be more uſeful than even the application of leeches.

CCXC. The conſequences attending this operation are always trifling, as it can neither tend to injure the future teeth nor thicken the gum, if properly performed. It is always called for, wherever convulſions ariſe, as the certain and primary means of relief; for, by thus removing the cauſe, the effect cannot fail to ceaſe.

CCXCI. In doing it, the great object is to remove all

the source of irritation, or unloose the whole protruding edges of the teeth that are advancing. If one point is left acting upon a portion of the undivided periosteum, the morbid symptoms will still continue. As much, therefore, depends on the operator as the operation.

CCXCII. The operation is performed after securing the child, as directed in vol. II. p. 230, by the surgeon opening the mouth with one hand, while with the forefingers of the other he introduces the fleam, or instrument, and makes a conical incision along the gums; for it must extend so as to relieve every tooth immediately advancing, and for such depth as to lay the tooth or teeth bare. If the symptoms are removed by it, the operation may then be considered as complete. Should they, however, recur after a certain time, it is again to be repeated; and, in performing it, attention should then be paid to make the division somewhat different from the former, in case any part, during the former operation, has been omitted.

CCXCIII. The propriety of the operation seems even pointed out by the propensity of children themselves to remove the existing irritation, by lessening the sensibility of the gum. Hence we find them fond of the use of hard substances, which, by their pressure against it, may have this effect. On this point, however, a question has arisen among practitioners, how far the use of such substances are proper, or should be allowed. In high degrees of irritation it is clear, when the gum is already in an inflamed state, their action must increase this; but, when the irritation is slight, by assisting the eruption, their application may be allowed, though, in-

ſtead of the coral, a piece of liquorice-root, or cruſt of bread, is preferable to any other.

CCXCIV. In high degrees of inflammation, cooling and ſedative applications to the mouth will be proper, as a little honey diluted with weak vitriolic acid, ſyrup of white poppies, &c.

CCXCV. The uſe of theſe laſt applications is particularly indicated where the gum becomes ulcerated in dentition; and, if ineffectual, aſtringent applications are to be had recourſe to, as a ſolution of white vitriol or alum made with honey; and, failing theſe, it is then to be treated as a different diſeaſe, under the head of Canker.

CCXCVI. During the period of dentition, from the ſymptoms of irritation exiſting, and the general tendency to an inflammatory ſtate, the child, if otherwiſe pretty ſtrong, ſhould be confined chiefly to the breaſt, and the quantity of additional nouriſhment diminiſhed.

Affections of Throat.

CCXCVII. Of ſore throats, or cynanche, children are ſubject to two peculiar ſpecies; the mumps and croup.

Mumps (Cynanche Parotidæa).

CCXCVIII. The former is a ſwelling of the neck and throat, or the parotid and maxillary glands, from the

appearance of which the name is derived; attended with reſpiration and deglutition little impeded, and inflammatory fever generally flow.

CCXCIX. The firſt ſymptoms of this affection are marked by the common attack of ſlight fever, with white furred tongue, ſoon ſucceeded by ſtiff painful neck, and ſome foreneſs of the throat. The pain and ſwelling of neck increaſe, which diſcover, on examination, a fulneſs and tenderneſs to the touch; theſe, in ſome caſes, are aggravated to acute recurrent pain. The ſwelling continues its progreſs for two or three days, when it begins to ſubſide: but in other caſes, as the diſeaſe advances, the ſkin often aſſumes inflammation. There prevails, however, little tendency to ſuppurate.

CCC. This diſeaſe is moſt frequent in its attacks towards the age of puberty; though it is alſo frequently met with at an earlier period. It terminates in three different ways; either by reſolution, which is moſt common, when the ſwelling gradually departs, and the glands aſſume their natural ſtate; by ſuppuration, which is more rare, when the ſkin gives way, ſome matter is diſcharged, and the ſores heal kindly; by tranſlation, when the affection, leaving the glands of the throat, attacks the teſticles, attended with acute fever, inflammation, and ſwelling; and, after leaving the teſticles, it is again tranſlated to the brain, or aſſumes the form of phrenitis. This termination by tranſlation only occurs towards the age of puberty; and is more frequent in ſome other climates than this.

CCCI. The treatment of this diſeaſe is, in general, very ſimple; ſome mild diaphoretic, and an occaſional laxative, being all that is required. But particular caſes muſt be regulated by the prevailing ſymptoms. If much fever attend, bleeding will then be indicated, and the uſe of antiphlogiſtics, as the ſaline draughts, nitre, &c.: while weakneſs, on the other hand, which more rarely takes place, muſt be counteracted by an oppoſite plan, or the uſe of cordials and ſtimulants.

CCCII. When, after the diſeaſe, an affection of the glands ſtill remains, and ſome hardneſs and ſwelling is felt, diſcutients will then be proper to the part, as the mercurial liniment or ammoniated oil, with the occaſional exhibition of a laxative.

CCCIII. In all caſes of tranſlation an active and rigid antiphlogiſtic courſe will be proper, as in other inſtances of acute inflammation.

Croup (Cynanche Trachealis).

CCCIV. Croup is a diſeaſe formerly treated in vol. I. p. 15. Its ſymptoms are, a ſharp ſhrill cough, with ſtridulous noiſe; laborious or wheezing reſpiration; flushed face, increaſed to livid during each paroxyſm; little external ſwelling, and general fever.

CCCV. This diſeaſe has been divided by late authors into the inflammatory and ſpaſmodic, which require a diſtinction in regard to their modes of treatment.

CCCVI. The former, or the inflammatory, is gradual in its attack, and is preceded for ſome days by ſlight feveriſh ſymptoms, with a teazing ſhort cough, before it aſſumes the characteriſtic marks of the diſeaſe; after which the ſymptoms uniformly increaſe in violence.

CCCVII. The latter, or the ſpaſmodic ſpecies, is ſudden in its attack, which is uſually during the night; and it often alſo intermits, or has intervals of alleviation, during its progreſs, in which it differs from the former.

CCCVIII. The cauſes of this diſeaſe have been aſcribed to cold and moiſture; but late authors have contended for its ariſing from a ſpecific contagion, and conſequently for the infectious nature of the diſeaſe. Theſe facts, however, are ſtill not ſufficiently eſtabliſhed. It has alſo been ſaid that this diſeaſe has been occaſionally met with in adults, contrary to former opinions on this ſubject. Children, however, newly weaned, are the moſt frequent victims of it.

CCCIX. Two ſtages are remarked in the progreſs of this complaint:

1. The inflammatory, which is terminated by the febrile exudation, or thick diſcharge, lining the trachea, the peculiar characteriſtic of the diſeaſe.

2. The mucous ſtage, when the trachea and its branches are now choaked up by this collected diſcharge, formed into a membrane or reduced to a ſolid ſtate.

CCCX. The formation of this laſt ſtage is denoted

by the urine, formerly clear, becoming turbid, and depoſiting, as well as the trachea, a ſediment or exudation, the effect of the diſeaſe.

CCCXI. The prognoſis in this diſeaſe is generally unfavourable, particularly in the inflammatory ſpecies, which is always of ſhort duration, but is often deceitful from apparent remiſſions; and recovery, when it takes place, is almoſt entirely confined to the ſpaſmodic kind.

CCCXII. The treatment here muſt be varied according to the particular ſpecies of the diſeaſe: in the inflammatory ſpecies, topical bleeding, by means of leeches applied to the trachea, and more general bleeding, ſhould be employed; but it will be only uſeful in the earlieſt ſtage of the diſeaſe, and, if relieving, ſhould be repeated. Emetics here, particularly antimonials, form a ſovereign remedy when employed in time, and bliſters will be found uſeful applied to the throat and nape of the neck, and alſo inhaling the ſteams of warm vinegar.

CCCXIII. In the ſecond ſpecies, or ſpaſmodic, aſafœtida, given both by the mouth and glyſter, is a medicine highly commended: it may be ſucceeded by the bark: cicuta is alſo employed, and other antiſpaſmodics.

CCCXIV. Mercury has of late formed a favourite medicine, in the form of calomel, frequently repeated, and in liberal doſes. Mercurial unction, alſo, is uſed to the throat.

CCCXV. This diſeaſe is ſometimes combined with other affections, particularly hydrocephalus, when it proves fatal from this laſt cauſe.

Coughs (Tuſſes).

CCCXVI. Cough is a common complaint of infancy, and ariſes from a variety of cauſes, being more frequently ſymptomatic than a primary affection.

Symptomatic Coughs.

CCCXVII. The cough attending on acute febrile diſeaſes is ſoon known, from the rapid progreſs theſe diſeaſes make, and from the other circumſtances which accompany their attack. Here the treatment is connected with the primary diſeaſe.

CCCXVIII. Cough, alſo, from cold, is marked by catarrhal ſymptoms, and is generally temporary in its nature. When connected with a glandular affection, loſs of ſtrength and hectic fever accompany the progreſs of cough, and point out the cauſe.

CCCXIX. Cough from teething is marked by the particular period of its appearance, and the other ſymptoms taken notice of under this head. *(Vide Dentition.)*

CCCXX. This complaint, however, when ariſing from diſordered primæ viæ, is often difficult to detect:

it is chiefly done by the preſence of coſtiveneſs, or the offenſive ſtate of the eructations and alvine diſcharge: it is alſo moſt ſevere during the night.

CCCXXI. The removal of this cauſe of irritation muſt be effected by purgatives, joined with ſoap and alkalis; as deſcribed under the head of Abdominal Complaints.

Primary Coughs.

Chincough. (Pertuſſis).

CCCXXII. Of coughs, as a primary affection, one of the moſt frequent is chincough.

CCCXXIII. The chincough, or hooping-cough, is a contagious diſeaſe, attacking in paroxyſms of a convulſive ſuffocating cough, with loud noiſe or hoop at each reſpiration, and generally terminating by vomiting.

CCCXXIV. It uſually begins as a common cough or cold, and continues for ſome time without any marked or peculiar ſymptom. There is generally, at firſt, the preſence of fever, having an evening exacerbation, which is various in its duration, and often attends the whole progreſs of the diſeaſe. Soon, however, the fits of coughing become to be marked by the loud noiſe, or hoop, the peculiar feature of the diſeaſe. At firſt there is little or no expectoration: as the diſeaſe advances, it comes on, at firſt thin, and gradually thickens in conſiſtence. The fits are always more ſevere

during the night than the day, and are at times so violent as to threaten ſtrangulation, the face and neck becoming perfectly livid, till reſpiration is recovered, and hæmorrhage likewiſe taking place from the noſe and different parts. The fit often terminates in a faint, though the appetite, on recovery, immediately returns.

CCCXXV. This diſeaſe is probably the product of a warmer climate, and imported into Britain like many others, and it is only of late years that its proper treatment has been underſtood.

CCCXXVI. It is clearly the effect of a ſpecific contagion of a peculiar nature, and highly active, affecting, like the ſmall-pox and meaſles, but once in life.

CCCXXVII. The primary ſeat of the diſeaſe ſeems evidently, from the ſymptoms induced by the paroxyſm, to be the larynx, which is thrown, in conſequence of a morbid irritability, into ſpaſm. How much further the morbid cauſe extends in its ſpecific action is not yet determined, though, in its conſequences, it appears to bring the whole reſpiratory organs into a diſeaſed ſtate.

CCCXXVIII. Our prognoſis is determined by three circumſtances: the period of life, vomiting, and hæmorrhage.

CCCXXIX. After the age of ſix years the diſeaſe is ſeldom fatal; but very young children, from their irritability, frequently ſink under it. When the fit terminates by vomiting, it is always reckoned a favourable

ſymptom, and a hæmorrhage from the mouth, noſe, and ears, relieves the more urgent ſymptoms.

CCXXX. Fever and laborious reſpiration are the two circumſtances indicating an unfavourable iſſue.

CCCXXXI. The treatment of this diſeaſe muſt be regulated by the prevalence of the two leading ſymptoms, fever and ſpaſm, and the degree of violence they diſplay.

CCCXXXII. When the fever is ſtrong, bleeding becomes clearly indicated, as well as bliſters, the uſe of mild diaphoretics, as the ſaline draughts, and alſo laxatives.

CCCXXXIII. When the ſpaſmodic ſtate again is more predominant, and the ſymptoms of fever mild, emetics will be highly uſeful; and antiſpaſmodics, as the aſafœtida, camphor, caſtor, oil of amber, &c.

CCCXXXIV. Where the cough only is troubleſome, and the other ſymptoms mild, an opiate, either in the form of the tincture opii or ſyrup of poppies, at bed-time, will be uſeful. Cicuta is much uſed with the ſame view.

CCCXXXV. External applications are alſo at times uſeful, as rubbing the hands and ſoles with ſp. of ammonia, frequently applying oil of mace or amber to the ſpine and pit of the ſtomach.

CCCXXXVI. When the diſeaſe is recurrent, and

returns ſome time after its apparent departure, an emetic, opening the bowels, and the uſe of antiſpaſmodics, will quickly remove it.

CCCXXXVII. A change of air is very uſeful for the conſequences of the diſeaſe; and a milk and vegetable diet ſhould at the ſame time be conjoined.

Common convulſive, or ſpaſmodic, Cough.

CCCXXXVIII. This complaint is marked by the ſame appearance of cough as chincough; but no fever attends it: it differs alſo from catarrh in the abſence of the catarrhal ſymptoms, and alſo in antiphlogiſtic remedies having no effect.

CCCXXXIX. This complaint occurs moſt frequently in children from two to four years of age: it is often very ſevere, and aſſumes the form of ſpurious peripneumony; but it is always aggravated by the antiphlogiſtic treatment.

CCCXL. In all caſes it yields to antiſpaſmodics, particularly the cicuta; and if much phlegm or expectoration is preſent during the uſe of this remedy, an emetic may be interpoſed. The cure will alſo be aſſiſted by the junction of the bark.

Cutaneous Diſeaſes (Morbi Cutanei).

CCCXLI. The cutaneous diſeaſes of children are

very numerous, and much varied in their appearance: t is proper, therefore, to bring them into one view.

CCCXLII. They arife, in general, from three caufes; viz.

1. Affections of the primæ viæ.
2. Teething; and,
3. Specific contagion.

CCCXLIII. When their origin is doubtful, our opinion is to be regulated by the fymptoms that attend or precede them, by the period of their appearance, and by the prevailing epidemic at the time.

CCCXLIV. All cutaneous eruptions have a remarkable tendency to break out about the face and head, as refiftance, from its expofure to the influence of external caufes, is there moft powerfully given to the freedom of the natural difcharge; and on the head, efpecially, this difcharge, when vitiated, has its fixed parts condenfed, and formed into fcales, cruits, and fcabs, by adhering to the hair.

Raſh (Effera).

CCCXLV. The moft fimple cutaneous affection that occurs is what is termed the Rafh.

CCCXLVI. Its feat is moft generally the face, neck, and breaft: its appearance is moft common about the decline of fummer, or the months of Auguft and September: it is equally fudden in its eruption and depar-

ture. A little ſickneſs is apt to ariſe when this laſt takes place, but it is merely temporary.

CCCXLVII. This diſeaſe is generally attended with ſome diſorder of the primæ viæ, and commonly ariſes from a change in the milk, in conſequence of overheating on the part of the nurſe, or ſome accidental irritation from what ſhe may have taken, or elſe from teething. By this cuticular appearance the original diſorder is relieved; and ſuch morbid appearances are to be conſidered, therefore, as an effort of nature to relieve the internal parts.

CCCXLVIII. Such kinds of raſh require no ſpecial treatment; but, in order to underſtand their cauſe, the ſtate of the primæ viæ, as formerly obſerved, ſhould be a leading queſtion in inveſtigating the nature of all children's complaints.

Baſtard Itch (Pſora Spuria).

CCCXLIX. Baſtard itch is an eruption affecting the face, with watery-headed veſicles and foul blotches, reſembling in its appearance the common itch or pſora: it is chiefly peculiar to the period of teething, and the decline of acute febrile or inteſtinal complaints.

CCCL. Its appearance gives relief to the morbid ſymptoms, when ſevere, at this period; and no particular treatment is requiſite for it, further than what belongs to common raſh, except perhaps a more particular attention to avoid cold.

Milk Blotches (Cruſta Lactea).

CCCLI. The cruſta lactea, or milk blotches, is an eruption of white veſicles, which aſſume a dark colour, reſembling the blackening of the ſmall-pox, and are ſucceeded by ſcabs producing an ichory matter, attended with conſiderable itchineſs.

CCCLII. The ſituation of this affection is generally the forehead and ſcalp, extending half-way over the face, and at times even proceeding farther.

CCCLIII. The period of its attack is the time of teething, and its effect is to leſſen the irritation in the ſyſtem from this cauſe. Hence it is conſidered by many in the light of a critical diſcharge.

CCCLIV. The duration of this affection is various: it continues ſometimes for months, but generally diſappears on the cutting of ſome teeth; in ſome caſes, again, it is known to appear long before the period of teething, and departs even before this proceſs takes place: its duration is judged of by the appearance of the urine, which, when thick and fœtid, is thought to be ſhort.

CCCLV. The treatment conſiſts in doing nothing but leaving it to nature: if, however, it is very extenſive, and the patients are uneaſy, an iſſue, joined with the uſe of a ſulphureous mineral, will tend to remove it. All abſorbents and alteratives are generally ineffec-

tual. The viola tricolor, in decoction, has been recommended, where the diſeaſe is obſtinate, as a ſpecific.

Anomalous Eruptions.

CCCLVI. Under this term we may compriſe the various defedations of the ſkin which attack children during the period of teething, and which ſeem to depend for their particular appearance on the peculiar conſtitution of the child. In ſome caſes they reſemble the meaſles, and are preceded by ſome of the ſymptoms of them, as ſickneſs of ſtomach and fever; in other caſes they form large bright red ſpots, and degenerate into the appearance of petechiæ, ſucceeded at times by round tumours in the legs. In other caſes they ſhow the eruptions of ſcarlet fever, and are chiefly diſtinguiſhed from it by the mildneſs of the ſymptoms.

CCCLVII. All theſe appearances are to be treated by moderating the ſtate of fever, if any appears, by mild antimonials, and by attention to the ſtate of the primæ viæ, from their critical nature.

Nettle-Raſh (Urticaria).

CCCLVIII. This is a raſh affecting the breaſt and lower limbs, with an appearance reſembling the ſtinging of nettles.

CCCLIX. It is ſudden in its attack, and preceded by much ſcreaming on the part of the child, and often diſappears in the courſe of a few hours.

CCCLX. Its treatment requires the uſe of ſome mild ſudorific, as the contraſerva powder, or abſorbents, with ammonia; and attention to the ſtate of the bowels.

Phlyctenæ.

CCCLXI. Phlyctenæ conſiſt of veſications or bliſters ſimilar to burns, varying in their ſize and the period of their continuance, which is generally ſome days. They contain an acrid lymph when opened.

CCCLXII. Their uſual ſituation is the belly, ribs, and thighs.

CCCLXIII. The indication pointed out for their treatment is the uſe of abſorbents, and the particular choice of theſe muſt be regulated by the ſtate of the primæ viæ.

The Scorbutic Eruption of Infancy.

CCCLXIV. This is an eruption which diſcharges a thin ſharp ichor, and infects the face and neck, attended with excoriation wherever it touches.

CCCLXV. In its treatment it is very difficult of cure. The expreſſed juice of the ſium aquaticum, or water-parſnip, has been reckoned ſpecific for it, and is given in the quantity of from one to four or five table-ſpoonfuls a day, mixed with an equal quantity

of milk; attention being paid, in the mean time, to the ſtate of the primæ viæ.

Grocer's Itch.

CCCLXVI. This eruption appears in ſome parts like the points of pins, with watery heads; at other times as large as peas, which do not itch or feel ſore; but it appears alſo frequently in foul blotches, which degenerate into ſcabby ſores.

CCCLXVII. The ſame appearances are renewed in ſucceſſion, and continue for months, leaving the ſkin at laſt of a dirty hue.

CCCLXVIII. It appears chiefly in a cold ſeaſon, beginning about the arms and thighs, and extending to the other parts, frequently over the whole body.

CCCLXIX. This eruption is not neceſſarily connected with the teething, for it often appears without it. It is alſo known to depart on the protruſion of ſome teeth. It has been known, at times in its progreſs, to be communicated to the mother.

CCCLXX. Its treatment conſiſts in the uſe of ſome mercurial alterative, as the Æthiop's mineral and the hydrargyrus cum cretâ; but external applications muſt at the ſame time be conjoined, particularly equal parts of the ſulphur and nitrated mercurial ointment.

Herpes.

CCCLXXI. A ſpecies of herpes, or broad ring-worm, is very apt to affect thoſe parts of the child that are fretted by its dreſs. The ſkin exhibits a very inflamed appearance, without much pain.

CCCLXXII. This affection often precedes teething, and is always connected with ſome diſorder of the bowels. The nurſe's milk has been found here in fault from its age.

CCCLXXIII. The treatment here conſiſts in attention to the ſtate of the primæ viæ by the uſe of abſorbents; and, if continuing, in changing the milk on the child.

General Axioms.

CCCLXXIV. In the treatment of theſe ſymptomatic eruptions, the following concluſions may be drawn:

1. That being of a critical nature, they are never haſtily to be repelled by external applications.

2. That, in all caſes, the irritation of cold ſhould be carefully avoided.

3. That the regulation of the primæ viæ is a leading indication, whatever the nature of the eruption be.

4. That the ſudden attack of morbid ſymptoms, on the diſappearance of an eruption, requires its being immediately recalled by the moſt powerful means, as the warm bath and ſudorifics; and,

5. The external applications to eruptions ſhould be no more than diluted kali, or the mildeſt waſhes and powders.

CCCLXXV. We have now conſidered the principal cutaneous complaints that ariſe from teething and affections of the primæ viæ; we are next to examine thoſe which are the effect of ſpecific contagion.

CCCLXXVI. They admit a diviſion into two ſpecies, the acute and chronic.

1. *Acute contagious Eruptions.*

Small-Pox (Variola).

CCCLXXVII. The firſt and moſt frequent diſeaſe of this claſs is the ſmall-pox. We already conſidered it in a general way, in vol. I. p. 41; we are now to examine it as peculiar to the infantine ſtate alone.

CCCLXXVIII. The ſmall-pox is a fever generally of the inflammatory or typhoid ſpecies, attended with a a local inflammation and pain of particular ſeparate points of the internal and external ſurface, forming an eruption. The appearance of this eruption is from the third to the ſeventh day of the fever, terminating in eight days from this appearance by the falling off of cruſts, which leave a pit or mark behind.

CCCLXXIX. The principal phenomena that require attention in the hiſtory of this diſeaſe are:

1. The ſucceſſion of the eruption.

2. The preference it diſplays to certain parts of the body in its ſeat; and,

3. The nature or progreſs of the eruption itſelf after its appearance.

CCCLXXX. With reſpect to the firſt, the eruption begins firſt about the face, and appears more ſlowly about the extremities, and frequently an interval of ſome days elapſes before it is complete on the latter.

CCCLXXXI. In regard to the ſecond, the eruption is always in greateſt quantity on theſe parts moſt expoſed to the external air, as the face, hands, and feet.

CCCLXXXII. With reſpect to the third, the appearance of the local inflammation or pock, and its progreſs, regulates our opinion on the termination of the diſeaſe.

CCCLXXXIII. It is in conſequence of this appearance the diſeaſe has been commonly divided into two ſpecies, the diſtinct and confluent.

CCCLXXXIV. The diſtinct kind is uſhered in by ſtrong ſymptoms of inflammatory fever, the moſt ſtriking of which are great rigor or cold fits, much ſenſe of debility, and torpid ſtate, with pain at ſtomach when preſſed on. Sleep is diſturbed by frequent ſtartings, the lower extremities feel preternaturally cold, and epilepſy or naſal hæmorrhage is a frequent immediate forerunner of the eruption.

CCCLXXXV. The ſymptoms of the next or middle period are marked chiefly by abatement of fever, the changes in the progreſs of the puſtules, which acquire their proper figure and ſize, diſcovering a whey-coloured veſicle on the top, ſurrounded below with an inflamed circular margin. This period is attended with ſome ſwelling on the face, which, ſubſiding, is renewed in the hands and feet.

CCCLXXXVI. The ſymptoms of the third, or declining, period of the diſeaſe, are marked by ſome recurrence of fever and affection of throat, attended with diſcharge of ſaliva. Theſe, however, ſoon abate.

CCCLXXXVII. The diſtinct ſmall-pox, then, is divided into three periods in their progreſs: the period of eruption, which extends to the ſixth or the ſeventh day after the eruption; the middle, or maturing, period, which extends from the termination of the former to the eleventh or fourteenth day; and the period of blackening, which extends from this laſt to the diſappearance of the diſeaſe.

CCCLXXXVIII. The prognoſis in this ſpecies is directed by the ſtate of the fever; for, where the head remains unaffected, no danger attends the diſeaſe.

CCCLXXXIX. The treatment of the diſtinct ſpecies is very ſimple. The application of cold conſtitutes the principal remedy, and this is done either by a free admiſſion of cold air, or, when the febrile ſymptoms are ſtrong, joining with it cold affuſions. Cold affuſion, in its application, ſhould be inſtantaneous, and applied

during the height of the hot ſtage; for, if done at any other period, it is apt to do harm.

CCCXC. Beſides this general treatment, attention is to be paid to the ſtate of the primæ viæ, and the affection of the throat.

CCCXCI. The firſt conſiſts in the uſe of cooling purgatives, with acid and detergent drinks; or, where the fever is ſtrong, in the uſe of antimonials that poſſeſs a tendency to paſs downwards.

CCCXCII. The affection of the throat is to be treated by a proper uſe of diluent gargles and waſhes, to remove the viſcid mucus; and, if deglutition is much impeded, bliſters may even be applied externally to diminiſh it.

CCCXCIII. The confluent ſmall-pox is preceded by epilepſy and fever, with violent nervous ſymptoms which attend their progreſs. Every ſymptom is here more ſevere than in the former ſpecies; and thus the diſeaſe may be ſaid to differ from the diſtinct kind—

1. In the period of its eruption.
2. In the progreſs of its fever; and,
3. In the manner and formation of its puſtules.

CCCXCIV. The period of eruption, or firſt ſtage, is generally finiſhed ſo early as the third day, when they appear in cluſters like meaſles. The progreſs of the fever, or ſecond ſtage, is not interrupted by this appearance, but rather increaſed in its ſymptoms and violence, and the progreſs of the puſtules is marked by an eryſi-

pelatous inflammation, the veſicles remaining flat and ſerous, without proper ſuppuration, or riſing to any eminence.

CCCXCV. The confluent ſmall-pox, then, like the diſtinct, is divided into three ſtages, the progreſs of which, from the violence of their ſymptoms, is ſooner completed. The period of eruption extends from the time of infection to the third day; the period of maturation, from this laſt, never exceeds the eleventh day; and the third, or blackening period, is finiſhed at fartheſt by the fourteenth.

CCCXCVI. The attendant ſymptoms of the third ſtage are here often uncommonly violent. The ſwelling of face begins at an early period. The flow of ſaliva, confined in the diſtinct kind to the third ſtage, is conſtant here, from the period of eruption; or, inſtead of it, a putrid diarrhœa attends. The affection of throat is alſo more conſiderable, and hæmorrhages are frequent from different parts.

CCCXCVII. From this hiſtory of the diſeaſe, the prognoſis to be formed is generally unfavourable; and its fatality is judged of by three ſymptoms: the violence of the fever, as marked by the increaſe and frequency of rigors; the obſtinacy of the diarrhœa; and the petechial or livid appearance of the eruptions.

CCCXCVIII. The favourable ſymptoms, again, are drawn from the ſtate of the voice and reſpiration, and from the continuance of the ſwelling of the face and hands, not ſuddenly diſappearing.

CCCXCIX. The fatality is generally on the eighth or eleventh day; ſometimes, though more rarely, it is protracted to the fourteenth.

CCCC. Diſſections of this ſpecies exhibit the ſame morbid appearances as attend putrid fever; for, in general, no puſtules ſeem attached to the internal viſcera.

CCCCI. From this view of the diſeaſe the matter of ſmall-pox ſeems an active ſpecific contagion, affecting but once in life, and exciting violent inflammation, which terminates ſpeedily, according to the particular manner of its reception into the body, and the ſtate of conſtitution either in benign ſuppuration or gangrene; but before examining theſe circumſtances of its action, as diſplayed by inoculation, the treatment of this laſt ſpecies of the diſeaſe merits conſideration.

CCCCII. The firſt ſtep then, from the nature of the diſeaſe, is the checking the violence of the inflammation; and, as the action of the cauſe is determined chiefly to the ſurface, the repreſſing of it here, as well as in the former ſpecies, forms the leading indication. But when theſe primary means prove ineffectual, and the inflammation proceeds to its ſecondary ſtate, other auxiliaries are then to be employed; and theſe conſiſt of antiſeptics, and ſuch remedies as abate irritation.

CCCCIII. The antiſeptic uſed is principally the bark, and it is beſt exhibited in a fermenting ſtate, or conjoined with yeaſt, wine, and acids, either the vitriolic or muriatic, in a dilute ſtate.

CCCCIV. The remedies, again, that abate irritation, are chiefly cold and opium; and the latter ſhould be exhibited from the fifth day, in a regular doſe, at bed-time.

Meaſles (Morbilli).

CCCCV. The meaſles are a continued inflammatory fever, attended with an eruption in the form of cluſters, little prominent, and reſembling flea-bites, marked by a vivid redneſs, gradually decreaſing till deſquamation enſues.

CCCCVI. The peculiar diagnoſtics of this fever are the ſtrong catarrhal ſymptoms, or affection of the eyes, noſe, and throat, with an inceſſant dry cough. The degree of ſickneſs attending varies in different caſes.

CCCCVII. This diſeaſe, like the ſmall-pox, is properly divided into three ſtages: the firſt extends from its acceſſion to the period of eruption, which is commonly the fourth day from the ſeeming attack; the ſecond, from the eruption to the time of deſquamation, which extends from the former period to the eighth day; and the third, from the deſquamation till the departure of the diſeaſe, or its change into a different affection.

CCCCVIII. During the firſt and ſecond ſtages the chief morbid circumſtance is the ſtrong catarrhal fever; and, during the laſt, the attack of a rheumatic affection, or diarrhœa, ſupervenes.

CCCCIX. The eruption, like that of the ſmall-pox, firſt appears on the face and neck, in diſtinct cluſters. As it occupies the reſt of the body, it thickens into patches, reſembling a thick raſh; and, when deſquamation enſues, it leaves a white dirty ſcurf upon the ſkin.

CCCCX. The prognoſis in this diſeaſe is determined by the pectoral ſymptoms, which, if fatal, is on the ninth day. But meaſles are rarely fatal of themſelves, but from the conſequences, or ſecondary affections, which are apt to attack the ſyſtem from the peculiar nature of their infection.

CCCCXI. The matter of meaſles, then, is a peculiar contagion, affecting but once, and producing ſtrong inflammation, or eryſipelatous affection, of the external ſurface, never tending to ſuppuration, and very rarely to gangrene.

CCCCXII. The treatment, therefore, conſiſts in counteracting inflammation; but, from the peculiar irritation on the lungs, the application of cold, as in ſmall-pox, would be here improper. A moderate temperature is, on that account, preferred; and the obviating the inflammatory tendency of the morbid cauſe truſted to veneſection, laxatives, and an antiphlogiſtic courſe. Though theſe remedies are indicated in every ſtage of the diſeaſe, they are particularly uſeful towards the termination, or evaneſcence, of the eruption; and veneſection is looked upon by every practitioner as a hurtful remedy till the eruption is complete.

CCCCXIII. If no natural diarrhœa comes on, which is a critical effort at the termination of the diſeaſe, laxatives are particularly indicated, from the peculiar fœtor the ſtools then acquire; and the operation of laxatives is always attended with a certain relief of ſymptoms, and ſhould be continued ſo long as dullneſs and fever remain, till the appetite and ſpirits return.

CCCCXIV. Emollients, during the progreſs of the diſeaſe, to leſſen the irritation on the lungs, are highly proper; and, towards its termination, even an opiate may be employed with the ſame view. Bliſters may be occaſionally applied when the pectoral ſymptoms are urgent.

CCCCXV. Antimonials are highly uſeful through the whole of the diſeaſe, and will ſuperſede the uſe of laxatives if directed ſo as to affect the inteſtines.

CCCCXVI. When the preceding diſeaſe has been violent in its attack, where the uſe of the proper means have been omitted, and its attack at the ſame time has been upon a weakly ſcrofulous conſtitution, morbid conſequences then ariſe more ſerious in their iſſue than the diſeaſe itſelf: theſe are, peripneumony, ophthalmia, conſumption, and dropſy.

CCCCXVII. The firſt of theſe attends the ſudden retroceſſion, or premature departure, of the eruption; and it either occaſions the diſeaſe to prove quickly fatal, or it degenerates into conſumption.

CCCCXVIII. The ſecond, or ophthalmia, is particularly confined to the eye-lids, which continue for a great length of time ſore, ſwelled, and inflamed. This affection always ſucceeds an improvident application of cold.

CCCCXIX. The third, or conſumption, is alſo the effect of the ſame expoſure; and the prediſpoſition to this affection is ſo ſtrong, that every precaution ſhould be uſed where the ſmalleſt tendency to ſcrofula is diſcovered in the habit, to avoid it while a child is ſubjected to the attack of meaſles.

CCCCXX. The fourth, or dropſy, is rare; and, when it occurs, it is attended with an enlarged meſentery, and ſhows the exiſtence of the ſame ſcrofulous prediſpoſition already remarked.

Chicken-Pox (Varicella).

CCCCXXI. The chicken-pox reſembles the ſmall-pox ſomewhat in its general appearance; but it differs from them in its ſymptoms, in its progreſs, and in its duration.

CCCCXXII. With reſpect to the firſt, it is preceded by a ſlight and uncertain fever, never poſſeſſing the ſtrong continued form of ſmall-pox.

CCCCXXIII. In regard to its progreſs, the veſicle, which is ſmaller than that of ſmall-pox, and diſtinct, fills all at once, and retains its fluid appearance during the whole period of its duration.

CCCCXXIV. On the third it is obſerved, that its continuance never exceeds three or four days; a ſpace too ſhort for the duration of ſmall-pox.

CCCCXXV. The matter of chicken-pox, like that of ſmall-pox, is a ſpecific contagion, attacking but once in life, the action of which has neither powers to produce ſuppuration, nor yet tendency to gangrene, but occaſions merely a clear thin liquor to be effuſed into the veſicle.

CCCCXXVI. From the mildneſs of the diſeaſe, little is neceſſary in the treatment. A laxative or two is ſucceſſively repeated on the diſappearance of the eruption.

Inoculation.

CCCCXXVII. As the two diſeaſes of ſmall-pox and meaſles are ſo violent in their attack in the natural form, one out of every eleven dying from the ravages of ſmall-pox; and as few eſcape their attack beyond the age of ſeven or eight years, various attempts have been formed to induce a more favourable form of them by means of inoculation.

CCCCXXVIII. This proceſs we already conſidered in vol. I. p. 45. and alſo in vol. II. p. 68. It conſiſts in the introduction of a ſmall quantity of morbid matter through the external ſurface, ſo as to affect by its action, in a ſpecific manner, the whole ſyſtem.

CCCCXXIX. This operation has been practiſed in

a variety of ways, at different times, and in different countries. What we are here chiefly to conſider are, *the proper period of its application*, *the cauſe of its mildneſs*, and *the circumſtances neceſſary to a ſecurity againſt a future attack*.

CCCCXXX. In regard to the firſt, from a number of experiments it appears that inoculation ſucceeds beſt after the ſixth month, and that children often eſcape the diſeaſe when expoſed to it previous to that period; but, if left to choice, that the ninth or tenth month is the moſt favourable time.

CCCCXXXI. With reſpect to the mildneſs of the diſeaſe from inoculation, it depends on the operation alone; and, in proof of this, matter taken from a confluent ſmall-pox has been found to produce a diſeaſe equally mild as that from the diſtinct kind. This is alſo verified in inoculation from the plague. The mildneſs of the diſeaſe may be even increaſed by attention in the performance of the operation; and avoiding, in introducing the lancet, to draw blood.

CCCCXXXII. In the laſt circumſtance, or in order to enſure a remedy againſt future infection, it is abſolutely neceſſary that the contagion affect the ſyſtem in general, and ſhow this effect by the preſence of ſome degree of fever, however ſlight or ſhort in its duration. Without this, the local effect in the inoculated part is not ſufficient; and this general influence of the contagion or fever is enough, even though no apparent local change ſhould follow. It is, therefore, the want of this general effect on the ſyſtem that has occaſioned the infection of ſmall-pox to be received in caſes where

inoculation, at a former period, has been performed; and, wherever no general eruption follows inoculation, the practitioner ſhould draw his opinion againſt the riſk of future infection more from this general influence or preſence of fever than from the apparent local effects in the inoculated part.

CCCCXXXIII. After inoculation, ſome reſtriction of diet is proper; and no animal food ſhould be allowed. An occaſional laxative may be alſo interpoſed; and, when the eruption appears, the ſame treatment is to be followed as that recommended in the diſtinct ſpecies of ſmall-pox. *Vide* vol. I. p. 42.

CCCCXXXIV. Inoculation for the meaſles, though it has been practiſed, is not general; but the ſame ſucceſs attends its application as for the ſmall-pox, the operation being here performed by a thread dipped in the blood.

Vaccine Diſeaſe.

CCCCXXXV. But, not ſatisfied with this mildneſs of the diſeaſe which the operation produces, practitioners of late have alſo joined to it a milder ſubſtitute, in the very principle of the infection or contagious virus, by the adoption of the cow-pox, or vaccine matter, for the variolous.

CCCCXXXVI. This matter has already been taken notice of in the former volumes (vol. I. p. 47, and vol. II. p. 69). It ariſes from a puſtule on the udder of a cow, in conſequence of infection, ſaid to be received from the diſeaſed heel of a horſe.

CCCCXXXVII. The appearance of this puſtule is commonly of a paliſh blue, or rather of a colour ſomewhat approaching to livid, and is ſurrounded by an eryſipelatous inflammation, which terminates frequently in ulceration, producing fever, and a leſſened ſecretion of milk in the animal.

CCCCXXXVIII. Infection from theſe puſtules is next conveyed to thoſe employed in handling the animal; and this infection appears in the form of inflamed ſpots, like veſications produced by a burn.

CCCCXXXIX. They are moſt frequent about the joints of the fingers, and at their extremities. They riſe in their progreſs into a circular form, with their edges more elevated than their centre, and of a colour diſtantly approaching to blue.

CCCCXL. From this ſuppuration of the puſtules, abſorption into the ſyſtem takes place, and the glands of the axilla ſwell, attended with quickened pulſe, ſtartings, general laſſitude, and pains about the loins and limbs; with vomiting, pain of head, and not unfrequently delirium.

CCCCXLI. The duration of theſe ſymptoms is from one day to three or four, leaving ulcerations in the primary affected parts, often difficult to heal, and producing ſores of a leſs virulent kind wherever the matter of theſe primary affected parts touches.

CCCCXLII. No general ſymptoms of cutaneous eruption attend this complaint, or are very trifling.

CCCCXLIII. The cow-pox affection, then, thus described, forms a certain preventative againſt the virus of ſmall-pox; and, conveyed by inoculation, produces alſo a milder diſeaſe than inoculation with the virus of this diſeaſe.

CCCCXLIV. It is performed in the ſame manner as with the virus of ſmall-pox, by puncture of the arm; and the ſymptoms take place much in the uſual time. On the ſeventh or eighth day uneaſineſs is felt in the axilla; this is ſucceeded by ſome chillineſs, loſs of appetite, and head-ach, and ſome degree of fever for a night.

CCCCXLV. The matter aſſumes rather more of a dark hue in the pock than that from ſmall-pox; and there is alſo more of eryſipelatous efflorescence.

CCCCXLVI. Eruptions rarely appear on the ſkin, but are confined merely to the inoculated part: under certain circumſtances they do ſhow themſelves, but are generally of a mild nature. The termination, however, is uſually eaſy, as in the other inoculation, particularly, it is ſaid, when the matter is taken from thoſe who have had the diſeaſe in its mildeſt form; and that an increaſing mildneſs of this matter ſeems progreſſively to take place.

CCCCXLVII. Though the facts on this diſeaſe are at preſent very numerous; yet a ſufficient interval of time has not as yet elapſed completely to aſcertain the point of its acting as a preventative againſt the virus of ſmall-pox. In the enthuſiaſm of innovation, facts are

often overlooked, conſidered as ſolitary, or forming but trifling exceptions to a general concluſion. Some of theſe at preſent exiſt, which have been attempted to be explained away: the cauſe of the virus itſelf, from the greaſe of the horſe, is now controverted by Dr. Woodville; and we are afraid the progreſs of time will contradict many other of the high-prized encomiums on the effects and conſequences of the diſeaſe.

Scarlet Fever (Scarlatina).

CCCCXLVIII. The ſcarlet fever, in infancy, is for the moſt part of the typhoid form, with or without an affection of the throat, and always marked by a roſy efflorescence of the ſkin.

CCCCXLIX. This diſeaſe we formerly conſidered in a general way, in vol. I. p. 49. It begins with the uſual ſymptoms of languor, debility, pain of head, and hurried circulation. The eyes are particularly affected, with ſtiffneſs of the neck, ſucceeded by affection of the throat; and theſe ſymptoms may be conſidered as being diagnoſtics of the diſeaſe till the efflorescence ſhows itſelf, which is on the ſecond or third day generally, firſt on the face, neck, and breaſt.

CCCCL. The ſymptoms of fever at this period conſiderably increaſe, particularly the pain of the head, with ſomething of a comatoſe ſtate. The tongue changes from the uſual white appearance of fever to a ſcarlet red; but, about the fifth day, ſome remiſſion

appears, and, the eruption decreaſing, diſappears about the ſeventh.

CCCCLI. The uſual ſymptoms of lowneſs and depreſſion that ſucceed fever are then experienced; and ſome weeks expire before health is reſtored.

CCCCLII. In the treatment of this fever the indications formed are, to counteract the general febrile ſtate of the ſyſtem, and to obviate the local affection of the throat.

CCCCLIII. The firſt is regulated by the violence of ſymptoms, and the greater or leſs tendency diſcovered to a putrid termination. Whenever the diſeaſe is epidemic, the typhoid form conſtantly exiſts; and then the bark, wine, and antiſeptics, become the chief remedies. The bark is beſt exhibited in a liquid form, and its tendency to purge counteracted, when neceſſary, by opium. When, on the contrary, the diſeaſe is ſporadic, ſaline draughts and antimonials may be truſted to.

CCCCLIV. The affection of the throat requires, at all times, frequent ſyringing with mucilaginous gargles, rendered active by acids or other antiſeptics, as tincture of myrrh, ſnake-root, or ſpirit of ammonia; and the frequency of doing is of great conſequence in early infancy.

CCCCLV. When much ſwelling attends this affection of the throat, bliſters, being then indicated, may be applied.

CCCCLVI. The affection of the throat is ſometimes known to increaſe as the efflorescence decays, and even to aſſume a gangrenous appearance; but this appearance ſeparates without any eſchar being thrown off.

CCCCLVII. The diſeaſe, on its departure, is frequently ſucceeded by anaſarca; but this, in infants, is very partial, and ſoon yields to the common means of purging.

CCCCLVIII. The prognoſis in this diſeaſe, in infancy, is leſs favourable than in adults; but our opinion muſt be regulated by the apparent putreſcent tendency; for, at this early period of life, a number of children ſink under it.

Miliary Fever (Miliaria).

CCCCLIX. The miliary fever is a diſeaſe rarely attacking children, unleſs epidemic; and then it is diſtinguiſhed by the uſual ſymptoms, as in other caſes.

CCCCLX. Theſe ſymptoms are, fever, with much itching of the ſkin, and profuſe perſpiration, which terminates in a meaſle-like eruption, and remiſſion of ſymptoms, on the third or fourth day. The eruption, however, varies its appearance in different caſes, at times forming ſmall pimples, of a pellucid appearance, called cryſtallines; and at times appearing in long red ſpots, reſembling the ſcarlet fever.

CCCCLXI. During the period of eruption the feveriſh ſymptoms continue with ſome violence; and no

proper or continued remiſſion occurs till the eruption begins to dry.

CCCCLXII. The treatment here is ſimilar to that in typhus, of which it partakes. Wine ſhould be exhibited in the form of white-wine whey, or mixed with the food. Cordials, as the confectio aromatica, the camphorated mixture, volatile alkali, compound ſpirit of vitriolic æther, and even bliſters, will be indicated by the degree of debility; and, where real putreſcent ſymptoms appear, the bark may be had recourſe to.

CCCCLXIII. The primæ viæ are to be kept clear by rhubarb or glyſters, the ſituation of the child kept cool, and cold acidulated drinks the only beverage allowed.

Contagious Chronic Eruptions.

Scald Head (Tinea).

CCCCLXIV. Tinea conſiſts in a ſcaly eruption of the ſkin of the head or hairy ſclap. It is attended with various degrees of acrimony, and becomes accordingly more or leſs infectious in its nature.

CCCCLXV. It ariſes from an obſtruction of the ſmall glands at the roots of the hair, which, paſſing into ulceration, produce, by the acrimony of their contents, the common form of the diſeaſe.

CCCCLXVI. In directing the cure of this affection, its particular extent or progreſs is to be conſi-

dered; and in every caſe it is to be held that it exiſts merely as a topical affection, and is to be chiefly removed by topical means.

CCCCLXVII. When the diſeaſe is incipient, ſimply ſtimulating the veſſels of the part, ſo as to reſtore their circulation, will be ſufficient; and, for this purpoſe, the ſulphur ointment, with a proportion of ℈ or muſtard-flour, will anſwer, rubbed in once or twice a day.

CCCCLXVIII. When the diſeaſe is more general, the head may be firſt bathed with the ſaponaceous or tobacco lotion twice a day, and the ſcabs then anointed with the ointment of nitrated ℈.

CCCCLXIX. When the ſcurfs, beſides being general, are thick and riſe high, the head muſt be firſt cloſe ſhaved, then waſhed with a ſolution of ſoap and the pitch ointment, with a proportion of hellebore powder rubbed in warm for a long time; and it is then to be covered with a wax cap. On the hairs ſeparating they are to be removed, when a new growth will take place. The repeated application of bliſters will have the ſame effect.

CCCCLXX. When the eruption is ſomewhat of a dry chronic nature, mild alteratives may be exhibited internally, as preparations of ſulphur or ℈, with the decoction of the woods. When the difficulty lies in the extraction of the hair, the pitch-plaſter, or the application of lime, will remove it.

CCCCLXXI. In moſt caſes of tinea, eſpecially when

extenſive, an iſſue or ſeton in the nape of the neck is uſeful.

CCCCLXXII. Simple ſcurfineſs of the head, independent of diſeaſe, often takes place from dirtineſs; and even without this, at times, as an effect of teething.

CCCCLXXIII. Combing and waſhing are the only means here neceſſary; and theſe may be aſſiſted by anointing the head occaſionally with cream when dry; or, if moiſt, mixed with arquebuſade water.

Itch (Pſora, Scabies).

CCCCLXXIV. This diſeaſe we already conſidered in vol. I. p. 221: it is chiefly introduced here to remark ſome peculiarities in its treatment in infancy.

CCCCLXXV. In no caſe ſhould the cure ever be truſted to external means without the exhibition of internal remedies. Sulphur and mercurials are the chief means of cure. The true or contagious itch yields readily to the former: when it does not, the diſeaſe is more of a mixed or ſpurious nature, and may then be attacked by mercurials, to which an alterative decoction ſhould be joined.

Shingles (Herpes).

CCCCLXXVI. The herpes, or ſhingles, is of two kinds; the miliaris, or ring-worm, and the exedens.

CCCCLXXVII. The former is moſt common, and deſcribed in vol. I. p. 220. It is attended with conſiderable itching, and is often alſo of a critical nature, and connected ſomewhat with a general affection of the ſyſtem.

CCCCLXXVIII. From its general appearance, eſpecially on parts expoſed, as the hands and face, its removal becomes abſolutely neceſſary, and it generally yields to the uſe of ſtimulant and aſtringent applications, as an infuſion of galls, a paſte of ink with muſtard flour, ſpirit of wine, ſaturnine applications in lotion or liniment, white vitriol ointments, or ointments with calcined zinc or nitrated mercury.

CCCCLXXIX. The ſecond, or more virulent form, is properly a ſpecies of ulcer, and is to be treated firſt with aſtringent or ſaponaceous waſhes, then tried with nitrated mercury in liniment; but, failing the efficacy of theſe means, the ſores may be touched with cauſtic.

CCCCLXXX. Alterative decoctions ſhould be employed internally during this local treatment.

Venereal Diſeaſe of Infancy (Lues Infantum).

CCCCLXXXI. The venereal diſeaſe of infancy we formerly treated in vol. I. p. 158; but not in the full manner the importance of the ſubject requires: we ſhall therefore enter upon it here at large.

CCCCLXXXII. The lues of infancy we find generally diſplays itſelf firſt about the genitals and nates; more rarely it attacks the face, breaſt, and lower extremities. Its appearance in theſe ſituations is firſt in the form of copper-coloured puſtules, ſimilar to what diſtinguiſh the ſecond ſtage of the conſtitutional diſeaſe in the adult. Theſe puſtules ſpread, and the body is covered with an appearance from them of what are commonly named *ſcorbutic ſpots*. Inſtead of puſtules, however, it is frequently obſerved in the form of livid blotches. Whichever of theſe appearances it aſſumes, it continues to ſpread about the face, eye-brows, chin, &c. having the ſame appearance as when recovering from the confluent ſmall-pox. The mouth alſo comes internally to be affected; and here it diſplays an appearance ſimilar to aphthæ. Theſe change into ſores, and gradually ſpread backwards to the fauces, and forwards to the lips and noſtrils; occaſioning ſtoppage of the noſe, difficulty of breathing, and other ſymptoms attending an impeded action of theſe parts. The nurſe's nipples then begin to turn raw, and to aſſume the appearance of chancre; and in this way the diſeaſe is tranſmitted from the child. With time, the body of the child becomes wholly covered with ulcerations; but, before arriving at this height, the conſtitutional diſeaſe generally diſplays itſelf on the nurſe by ulcerations of the throat.

CCCCLXXXIII. The eyes and the ears of the child become alſo, in the progreſs of the malady, conſiderably affected by matter forming in theſe parts; and in proceſs of time, if the diſeaſe is not removed, hectic ſymptoms coming on prove fatal. The affection of the

eyes is very characteriſtic of this ſpecies of lues, and has been particularly remarked by the phyſicians of the Venereal Hoſpital for Children in Paris.

CCCCLXXXIV. The time at which the diſeaſe appears in children is moſt frequently in ten days or a fortnight after birth: and, previous to this, the child is apparently healthy, and the ſkin clear and ſmooth. At other times, however, it is coeval with birth, or appears much earlier.

CCCCLXXXV. From this deſcription, the peculiarities that may be remarked in this ſpecies of lues are;

1. With reſpect to its different appearance; and,
2. The mode of infection.

CCCCLXXXVI. The chief circumſtances in which it differs from the conſtitutional diſeaſe of the adult are;

1. In ſhowing a ſpecific attraction to the genital parts, independent of the mode of introduction.
2. In diſplaying no primary action; and,
3. In diſcovering no tendency at firſt to affect the throat.

CCCCLXXXVII. The cauſe of the firſt of theſe cannot be explained; and all poiſons, we find, poſſeſs a ſpecific attraction to particular parts.

CCCCLXXXVIII. With reſpect to the ſecond, even at times in the adult there is very little primary operation of the virus, as in the lymphatic chancre; and we

find that exceſs of ſecretion in parts diminiſhes the action of the virus on its introduction. In the fœtus and in childhood, the activity of the lymphatics is not equal to what is obſerved afterwards; and the larger veſſels poſſeſs then more power. Hence we ſuppoſe, that from the exceſs of fluids in the habit of the fœtus, and the ſmall activity of the lymphatics, the virus may be introduced without any local effects, till it is determined by receiving a new ſtimulus from the force of the circulation to the parts it attacks.

CCCCLXXXIX. The third circumſtance, or its ſmall tendency to affect the throat at firſt, may be explained by obſerving, that though between the genital organs and the throat there prevails a remarkable ſympathy, as allowed by all authors, yet this does not take place till the genital organs become fitted for executing their proper offices, as diſplayed by the changes they receive at the age of puberty. Till the age of puberty, then, there is no particular irritation on theſe glands to produce this ſympathy, while the natural determination of the circulation being to the ſkin, the diſeaſe therefore appears chiefly here.

CCCCXC. The mode of infection in this caſe is a ſubject attended with ſome difficulties; and we conſider it as derived either from the male or female.

CCCCXCI. The firſt of theſe is perhaps the rareſt; but that the ſemen may be conveyed to the uterus in a vitiated ſtate, by accidental contamination in its paſſage through the urethra, is not to be doubted. How it afterwards acts, it is impoſſible to explain; yet the fact

is ſufficiently certain, that children are every day born with appearances ſimilar to lues, where no taint ever prevailed in the habit of the mother, and where, therefore, we have reaſon to ſuppoſe the original ſtamina, at the time of impregnation, received ſome morbid change.

CCCCXCII. The ſecond mode of infection, or from the female, is by far the moſt frequent; and it may be communicated here, either,

1. By the virus circulating in the general maſs; and determined, without affecting the mother, through the circulation of the placenta, to the child.

2. By contamination in its paſſage through the vagina at delivery; or,

3. By ſuckling from an eroſion of the nurſe's nipple.

CCCCXCIII. The firſt of theſe is conſidered by Mr. Hunter as barely probable; but it is a known fact, that the contagion of ſmall-pox has been conveyed to the fœtus without affecting the parent; and we have reaſon, therefore, to ſuppoſe, that other contagions may be conveyed in a ſimilar way. We admit, at the ſame time, that it is not a conſtant effect, as contagions affecting the mother ſeem alſo often eſcaped by the fœtus; yet where the virus exiſts in the circulation of the parent, from the increaſed determination to the uterus favouring its depoſition, it may be communicated in this way.

CCCCXCIV. From this reaſoning, then, we conclude, that where a child is born with ſymptoms of

lues, as deſcribed, or rickets appear ſoon after birth; or where a woman repeatedly miſcarries, without any evident cauſe, about the ſixth or ſeventh month, and the child is expelled dead or in a putrid ſtate; or if the motion of the child formerly felt ceaſes at that period, though it is retained for the nine months, being then born in the former ſtate; or, if living, ſo ſhrivelled and emaciated in every part as to bear the marks of old age—an appearance ſtrongly remarked by the phyſicians of the Venereal Hoſpital for Children at Paris; in all theſe caſes, the infection has either been communicated from the father, or in this way. But as other infections, it was remarked, are not always communicated in this way, though exiſting in the ſyſtem of the mother, it is therefore moſt probably owing to the father; and the removal of infection in him alone is to be conſidered as the only means of preſerving the future offspring, or guarding againſt thoſe hereditary affections to which they appear ſubjected.

CCCCXCV. The ſecond mode of infection, or by the vagina in its paſſage at delivery, is more frequent than the former. It was firſt taken notice of by Dr. Hunter; who remarked, that the diſeaſe did not appear till ten days or a fortnight, for the moſt part, after birth; in which period the virus had time to be fully introduced into the ſyſtem. The inactive ſtate in which the virus frequently remains in the vagina ſtrongly favours this opinion: and hence, even where no venereal ſymptom can be traced in the mother, we find that the fœtus often diſcovers the infection ſoon after birth; and that, by putting the mother ſolely on a mercurial courſe, the diſeaſe may in a

future delivery be prevented. Dr. Swediauer has ſuppoſed, that in this way alone the venereal diſeaſe can be conveyed to the fœtus, if we may make any concluſion from what he delivers; for he has doubted, whether the diſeaſe has ever appeared in children at birth. Of this, however, there have been many inſtances. Wherever, therefore, the child has been born with marks of infection, the mother ſhould not be put on a mercurial courſe unleſs ſhe ſuckles, as the infection is probably derived from the father ſolely. Where, again, the diſeaſe does not appear for ſome time after birth, or the period mentioned in the hiſtory, it is then to be conſidered as owing to the virus derived from the mother, and a mercurial courſe recommended to her. It is a matter, indeed, of the utmoſt importance, to be able to detect to which of the parties the infection of the child is owing, as it is only by this we can be able with certainty to effect a cure. It is often attended with conſiderable difficulty, and can only be known from the previous hiſtory of the patient; but as this, in the caſe of the female, we can hardly learn, (for delicacy forbids ſuch an inquiry,) we can only judge from the time of appearance, and other circumſtances in the infection of the child. On this account, indeed, it will be generally moſt proper that both parties are put on a courſe of medicine; and in ſuch ſituations, as the infection is chiefly communicated by the genitals, particular attention ought to be paid to their ſtate.

CCCCXCVI. The laſt way in which we mentioned infection can be conveyed to the child, is by means of the nurſe; and to determine whether the contagion is received in this way is ſometimes pretty difficult. If,

however, the firſt ſymytom on the child is the aphthous appearance of the mouth, there is great ſuſpicion of it; for we find, that this affection of the mouth does not occur for ſome time when the infection is not received from the nipple. And ſome authors have even alleged, in proof of this, that if mercury is given immediately to the child, on the firſt marks of the diſeaſe, no infection will often be conveyed to the nurſe, as the progreſs of the diſeaſe is thus ſtopped, and the affection of the mouth prevented. The character of the nurſe, her connections, and the examining her ſtate of health at the time, will be able to give ſome farther information, and particularly if her own child has been ſtill-born; or, if alive, whether there are any marks on it of the preſent diſeaſe, or whether the woman ſuckling it has any affection of her breaſt. The nipple, alſo, of the nurſe herſelf, is always here more or leſs affected, though it is at times ſo ſlight as hardly to bear detection; yet, without this, we conceive that the diſeaſe could not be communicated, as no matter could be formed to produce the contagion; and we know, that the milk itſelf is entirely free from the diſeaſe. Where, again, the diſeaſe is communicated from the child to the nurſe, the nipple of the nurſe becomes ſwelled and raw, ſmall veſicles appear on it, which degenerate into chancres; and theſe are ſucceeded ſometimes by an eryſipelatous eruption, ſimilar to herpes, on the breaſt itſelf; but more frequently the neighbouring glands of the axilla ſwell, and the lymphatics are felt from the ſeat of the infection in the nipple towards it in the form of a ſtraightened cord; and the diſeaſe, being thus introduced, ſoon diſcovers itſelf by the ſame appearances which attend its conſtitutional operation in

the adult, though it often here diſplays a virulence uncommon to what is obſerved where it is firſt introduced by a primary action on the genital ſyſtem: and ſeveral moſt lamentable inſtances are to be met with in different publications of the effects of venereal infection communicated in this way.

CCCCXCVII. Having thus pointed out the circumſtances which diſtinguiſh this diſeaſe in children, and the various ways in which the infection may be conveyed, we proceed, in the laſt place, to conſider the method of cure.

CCCCXCVIII. By many authors, the venereal diſeaſe in children has been conſidered as incurable. This is, however, by no means the caſe: and thoſe acquainted with practice will find it the reverſe; for it yields much more readily to the uſe of mercury than in the adult. Children, however, are more eaſily cured before than after weaning; and thoſe born with the diſeaſe are more difficult to cure than thoſe who receive the infection at birth, or afterwards from the nurſe. It is alſo to be remarked, that from the calculations of the phyſicians attending the Venereal Hoſpital for Children near Paris, it appears that a greater proportion of infected children ſurvive childhood than of healthy children entruſted to the care of common nurſes.

CCCCXCIX. In curing the lues of children, there are two ways of exhibiting mercury; either by giving it to the nurſe or the child.

D. In giving it to the nurſe, we are leſs ſenſible of its operation; and, before her fluids are impregnated, there is danger of the child ſinking under the diſeaſe. From the experiments of the late Dr. Young, it was found even difficult to impregnate the milk; and the cure ſucceeding in this way he has attributed rather to the mercurial atmoſphere in which the child, from ſleeping with the nurſe, and by being kept conſtantly in her arms, is confined. This difficulty, however, of impregnating the milk is denied by another author; who obſerves, that, by evaporating a quantity of it, it generally poſſeſſes ſo much mercury as to bear detection. But as it is often difficult to procure a nurſe who will undertake the taſk of ſuckling ſuch children; and the mother, if diſeaſed herſelf, ſhould never be allowed to do it; it has been propoſed to impregnate with mercury the milk of other animals, and in this ſtate give it to the child. Thus, in Van Roſenſtein's treatiſe, we find directions for clearing the ſkin of a goat of its hair, and rubbing it with mercurial ointment, which is to be performed in the ſame manner as in the common method by frictions; when, its fluids coming to be loaded with the remedy, it will thus be conveyed in an eaſy and ſafe manner to the child.

DI. The exhibition of mercury to the child itſelf is a practice now more generally followed; and as a very ſlight irritation from it is here ſufficient to effect a cure, in order that this irritation may not be too ſtrong, thoſe preparations are to be preferred which have a tendency to paſs off by the bowels, by which any exceſs of irritation is prevented; and, from the quantity of fluids in the infantine ſtate, this evacuation, unleſs

carried far, is not attended with that debility which follows ſo remarkably any increaſed diſcharges in the adult. Children poſſeſs at the ſame time, though thus ſuſceptible of the ſlighteſt irritation, little tendency to ſalivation; which would ſhow, that the lymphatic ſyſtem is not in the ſame ſtate of activity as afterwards. As a proof of the ſmall tendency they poſſeſs to ſalivation, a caſe uſed to be mentioned by the late Dr. Young, of Edinburgh, where 12 doſes of calomel were given to be uſed in 12 days; by miſtake, however, the whole number was uſed in 6, and the child was much relieved, though not the ſmalleſt ſymptoms of ſalivation appeared. In ſupport of what was mentioned, that a very ſlight irritation will cure the diſeaſe in children, we find that the guaiac, and the other woods which in this climate have little effect on the adult, frequently perform a cure here.

DII. The preparations of mercury commonly employed in this caſe are, the calomel, and Van Swieten's ſolution. The former of theſe is generally exhibited in the quantity of a grain every night; and, after ſix or eight doſes, a ſenſible amendment is perceived. The ſame doſe is then repeated at the diſtance of every ſecond night; and, in twelve days longer, the diſeaſe is commonly removed. Where the ſolution, again, is employed, thirty drops make a ſufficient doſe, and it ſhould be given in milk. The ſame rules are to be obſerved in continuing it as with the calomel, and the ſame ſucceſs may be expected. It is the favourite remedy of Van Roſenſtein in the venereal complaints of children; and, wherever given in an increaſed doſe,

it has a tendency, like the calomel, to pafs off by ftool.

King's Evil (Scrofula).

DIII. Scrofula is very various in its appearance, and extended in its feat. Its primary fymptom is the fwelling of the lymphatic glands, ending in ulceration: this ulceration extends it to other parts; and, in its progrefs, the whole of the fyftem appears to take on the morbid ftate.

DIV. The previous fymptoms of this difeafe are, often, a peculiar look about the eye, and a remarkable thickneſs of the upper lip; frequently, alfo, an enlarged belly.

DV. If not originally induced by it, the cauſe of this malady is often at leaft brought into action by preceding difeafe, or that ftate of debility which preceding difeafe creates. Hence it is known to follow fmall-pox and meafles, hooping-cough, and teething.

DVI. Scrofula feldom appears before the age of two years; and it alfo departs, in its external forms, at the age of puberty. The period, therefore, which fucceeds teething, and precedes puberty, is the diftinguifhing æra of its attack.

DVII. The cauſes of fcrofula are ftill uncertain. Chemiftry has detected a fault in the fluids, and

the apparent ſtate of conſtitution ſhows equally a debility and laxneſs of the ſolids. Theſe faults will naturally be increaſed by accidental circumſtances. Hence we find the diſeaſe moſt prevalent in a cold damp ſituation, and increaſed by whatever deprives the body of its due nouriſhment, or conveys it of an improper kind.

DVIII. The prognoſis in ſcrofula is determined in general by its particular form. The external ſpecies are ſeldom attended with danger, unleſs the ulcerations are very extenſive: the internal forms, again, are generally fatal. The diſappearance, alſo, of the diſeaſe, in any particular form, does not ſecure againſt a future attack.

DIX. The general treatment is alſo regulated by the ſame circumſtances.

DX. The ſwelling in the firſt ſtage will frequently yield to local ſtimulants, as ſlight mercurial friction, ſo as to paſs through the glands: fumigations, alſo, with ſulphurated mercury, diſcutients of various kinds, as taken notice of in vol. II. p. 435, particularly a ſtrong ſolution of camphor in oil. When theſe means fail, ſuppuration ſhould then be induced as quickly as poſſible by a ſuppurative cataplaſm, or a bliſter, and even electricity to the part, with the uſe of ſtimulants internally.

DXI. When ulceration has once taken place, the employment of the tonic plan becomes highly ne-

ceſſary, occaſionally interpoſing neutral ſalts, and joining to the internal tonics the uſe of ſea-bathing. This treatment, however, is only ſuited to the milder forms of the diſeaſe, and is farther detailed in vol. I. p. 185, and in vol. II. p. 117 and 149. The particular treatment of internal ſcrofula requires a more ſpecial detail.

Watery Head (Hydrocephalus).

DXII. Hydrocephalus, or the watery head, is a diſeaſe peculiar to infancy. It is of two kinds; the external and internal. The former is generally coeval with birth, or precedes it: the latter, however, is moſt frequent in its occurrence, and generally fatal in its termination.

External.

DXIII. In the external hydrocephalus, the ſeat of the fluid is the ſurface of the brain. Such children are often ſtill-born; but it frequently appears immeately after birth, and in this caſe the treatment ſhould be truſted to a frequent application of bliſters, placed ſo as to affect the different ſinuſes, eſpecially the longitudinal one, and to promote a diſcharge from that ſituation ſo as to remove the internal accumulation; and life is often protracted till the head acquires a moſt ponderous and unwieldy ſize.

DXIV. Though ſome inſtances of cure may happen from this plan, the diſeaſe is in general fatal.

Internal.

DXV. In the internal hydrocephalus, the depoſition of the fluid takes place in the ventricles.

DXVI. This diſeaſe is diſtinguiſhed by pain of head, acroſs the brow, accompanied with nauſea, ſickneſs, and other diſorder of the animal functions, without any evident cauſe, and ſudden in their attack; variable ſtate of pulſe; conſtant ſlow fever; and, in the advanced ſtage of the diſeaſe, dilatation of the pupil of the eye, with a tendency to a comatoſe ſtate.

DXVII. The diſeaſe is almoſt peculiar to children, chiefly to thoſe of a ſcrofulous habit. Its attacks are ſeldom known to extend beyond the fourteenth year.

DXVIII. It has been divided into *three* ſtages, in its progreſs.

DXIX. The *firſt* is marked by loſs of appetite, and a degree of melancholy and uneaſineſs, without the child being able to fix on any particular ſymptom. Pain in the head is next felt, eſpecially above the eyes, and in a direction betwixt the temples. This tenſive pain gradually extends, and is at laſt felt more particularly in the arm and leg of one ſide. The affections of ſtomach next commence, and alternate with the pain and uneaſineſs of the head. The febrile ſymptoms, though pretty conſtant, are milder in the morning, but ſuffer always an evening exacerbation. Vomiting occaſion-

ally occurs, but coſtiveneſs is a leading ſymptom: the tongue is little affected, except towards the end, when it aſſumes a ſcarlet colour, and ſometimes becomes aphthous. As the diſeaſe advances, all the ſymptoms of hectic are conſpicuous: and, during the whole diſeaſe, the child ſhows a ſtrong propenſity to the bed, or a deſire to avoid being moved.

DXX. In the *ſecond* ſtage, a remarkable alteration takes place in the pulſe, which becomes ſlow and heavy. The diſeaſe alſo is ſtrongly marked by the ſtate of the eyes, and a dilatation of the pupil is obſervable; ſometimes even double viſion prevails. The child alſo ſcreams out without being able to aſſign a cauſe, and his ſleep is in general diſturbed.

DXXI. In the *third* ſtage, the pulſe returns again to the febrile ſtate, becoming uncommonly quick and variable; and convulſive ſymptoms take place. Though the diſeaſe generally proceeds in the manner deſcribed, yet ſometimes it is ſudden in its attack.

DXXII. Our opinion in this diſeaſe is always unfavourable; and, wherever recovery has taken place, we have reaſon to think the phyſician has been miſtaken in the malady. It is moſt frequent in its attack from two to ten years.

DXXIII. Diſſections here ſhow different morbid appearances of the brain; moſt commonly there is from four to ſix ounces of ſerous effuſion within it; at other times the organ appears, as it were, gorged with blood; collections, alſo, of a viſcid tenacious matter, have been

found in cyſts upon the external ſurface of the brain, and tumors attached to its ſubſtance.

DXXIV. In the treatment of the diſeaſe, three indications are formed:

1. To relieve the urgent ſymptoms, particularly thoſe of the head.

2. To diſcharge the contained fluid; and,

3. To reſtore the habit impaired by the diſeaſe when the former are ſucceſsful.

DXXV. The firſt is effected by topical bleeding, with leeches applied to the temples, or from the jugular vein; which may be followed by the uſe of bliſters, or the formation of iſſues, while the ſymptoms of ſickneſs and vomiting will be alleviated by the ſaline julap and abſorbents, to which the addition of an opiate may be occaſionally made.

DXXVI. The ſecond indication is to be chiefly accompliſhed by the uſe of mercury, either in the form of calomel, given in ſmall doſes, or by unction applied as near as poſſible to the ſeat of the diſeaſe, or about the head.

DXXVII. The ſame has been alſo attempted by diuretics, though leſs ſucceſsfully, as the foxglove, cream of tartar, &c.

DXXVIII. The third conſiſts in the uſe of tonics, the beſt of which is the cold bath and the bark.

DXXIX. From the incurable nature of *hydrocephalus*,

its prevention becomes an object of peculiar importance. Hence has been recommended the early introduction of an iſſue in the head, in all caſes of prediſpoſition.

Meſenteric Fever (Febris Meſenterica).

DXXX. Meſenteric fever is moſt common in its attacks from the age of three or four years. It is irregular in its paroxyſms, occaſionally remitting, and at other times entirely intermitting. It is attended with loſs of appetite, ſwelled belly, pain of bowels, daily attacking, and alternating with periods of eaſe, and ſome days it is entirely abſent. The child ſenſibly falls off; it cannot walk, if formerly able to do it; and inclines to lie much in one poſture, from the languor and debility induced; a general flaccidity and paleneſs of countenance is conſpicuous; and, in the progreſs of the diſeaſe, the meſenteric affection becomes viſible, by the increaſed ſize of belly, its hardneſs, and pain.

DXXXI. From this period the hectic is conſtant, and little remiſſion occurs. There prevails much thirſt, and a fœtid breath. A fœtid frothy diarrhœa ſupervenes, which proves fatal; or the child, without this, is cut off by a gradual waſting, without any ſtrong aggravated ſymptoms.

DXXXII. This diſeaſe rarely occurs after the age of eight or ten; but it is very frequent before this period, and is promoted by all the complaints of childhood, which render active the ſcrofulous prediſpoſition.

DXXXIII. The treatment of the diſeaſe varies ſomewhat according to its different ſtages.

DXXXIV. In the firſt ſtage, the chief ſymptoms are ſlow belly, recurring abdominal pain, and intermittent fever. Theſe ſymptoms are counteracted by firſt opening the bowels, and then beginning a courſe of calomel, in ſmall doſes, given every other day, and alternated with neutral ſalts. On the remiſſion of fever, ſome light chalybeate, or other tonic, is then to be employed.

DXXXV. The ſecond ſtage, again, when the abdominal affection is more permanent, is marked by ſimilar emaciation of the extremities, as well as the increaſed abdominal ſize, and by a loſs of colour and general hectic ſtate. In this ſtate the treatment depends entirely on reſolution of the ſwelling, and which has chiefly been attempted by mercury and ſteel. Mercury, in this ſtage, has been often introduced by friction, joined with volatile liniment; and this or calomel is the beſt form, or elſe by clyſter, as recommended by ſome writers. At any rate, friction is well adapted as an auxiliary means to the relief of this diſeaſe, and ſhould be employed daily, joined with ſtimulating plaſters or oils.

DXXXVI. During the progreſs of the mercurial courſe, the occaſional interpoſition of neutral ſalts ſhould take place; and the mercurial may be alſo joined with a narcotic, as the cicuta.

DXXXVII. If the ſymptoms yield to theſe means,

tonics become then the next reſource to obviate the conſequences of the preceding affection; and the beſt with this view are the bark, ſteel, and cold bathing. Both the bark and ſteel ſhould be given in a fluid ſtate; the former in decoction, the latter as a chalybeate water.

DXXXVIII. Beſides medicine, diet here claims a chief conſideration. All coarſe diet is pernicious: the lighteſt and moſt nutritious ſhould be employed, and all fat and greaſy aliments avoided.

Hectic Fever (Hectica).

DXXXIX. Hectic fever may be termed the general and fatal termination of all protracted complaints both in infancy and age: it is, therefore, entirely ſymptomatic, and can hardly be disjoined from the particular complaints with which it is preſent and connected.

DXL. In infancy, however, ſome ſpecies of hectic are found to terminate in health, and particularly that from worms or teething. Here recovery frequently takes place beyond the idea of hope, and that ſo rapidly as to bear no proportion with the preceding period of illneſs. In forming a prognoſis, therefore, on the termination of the infantine diſeaſe, much caution is often neceſſary.

DXLI. For the treatment of hectic, in infancy, the particular nature of the primary diſeaſe muſt be the leading direction. Attention muſt alſo be paid to the

particular ſtate of the primæ viæ, to a proper choice of diet, and to ſuch a proportion of exerciſe as the weakneſs of the child will allow.

Rickets (Rachitis).

DXLII. Rickets conſiſt in an enlargement of the head anteriorly, and in a ſwelling of the joints, flattened ribs, protuberant belly, and general emaciation, with a bloated or florid countenance.

DXLIII. This diſeaſe we already deſcribed in vol. I. p. 183. It is evidently, from its hiſtory and the period of its firſt appearance, the product of refinement, and the effect of that artificial mode of life the progreſs of civiliſation has introduced.

DXLIV. It is found particularly to follow bad management, as expoſure to cold and wet, and a weak watery diet. Hence it is more frequent in the lower than in the higher orders of life. Its appearance, alſo, is often the effect of preceding complaints exhauſting the vigour of the conſtitution; and it is alleged to be the frequent conſequence of hereditary diſeaſes in the father, or long-continued venereal complaints.

DXLV. The moſt frequent period of its attack is from nine months to two years. It is marked by a general falling off of the fleſh and ſtrength. The child loſes its colour, becomes weak, and diſlikes to ſtir. The enlargement of the bones, the diſtinguiſhing fea-

ture of the diſeaſe, then commences; and they gradually ſwell and ſoften, ſo that little depoſition takes place of their earthy part. This ſwelling is moſt remarkable at their joints, and gradually extends to every part of the bony ſyſtem, if not interrupted by ſome favourable circumſtance in the change of conſtitution, or in the particular treatment.

DXLVI. With this ſtate of the oſſeous parts there prevails a quick feeble pulſe, an early decay of the teeth, which rot and fall out, and a premature underſtanding for the age of the child.

DXLVII. Our opinion, as to life, is generally favourable in this diſeaſe; for, though the appearances are ſo unpromiſing, the diſeaſe ſeldom proves fatal.

DXLVIII. To invigorate the ſyſtem is certainly the leading indication of cure, and that chiefly by increaſing the depoſition of earthy matter which ſeems deficient in the bony ſyſtem. This is done in three ways:

1. By abſtracting the quantity of fluid nouriſhment as much as poſſible, by a diet in which a greater proportion of animal food prevails; or elſe, where vegetable food is uſed, by employing it in moſt ſtimulant forms.

2. By the uſe of tonics, eſpecially thoſe of an aſtringent nature, as the chalybeates and bark, premiſing and alternating their exhibition with an occaſional emetic or laxative, of a warm ſtimulant nature.

3. By the application of the external means of exerciſe, friction, and cold bathing, all tending to diſſipate

he more fluid parts, and to give firmneſs and conſiſtncy to the ſolids.

DXLIX. The friction ſhould here follow the cold bathing, and be joined with ſome of the ſtimulant oils to aſſiſt its effect, as the ſkate oil, which has been highly commended.

DL. In very young children, the cold bathing has been directed to conſiſt merely of daſhing the face occaſionally with cold water, in a gentle manner, ſo as to occaſion an exertion of its muſcles; or to wrap the extremities round with cold clothes, dipped in ſpirits and water.

DLI. In a certain time, by regimens alone, the diſeaſe is recovered; and that often without the uſe of medicine at all.

Difficulty of Urine, with Mucous Diſcharge.
(Iſchuria Mucoſa.)

DLII. A mucous diſcharge from the bladder, or a ſpecies of iſchuria, is frequent in infancy, during the period of teething and the progreſs of different inflammatory affections.

DLIII. This affection is marked by pain in the diſcharge of urine, a frequent deſire to void it, or with pain on the firſt attempt. The urine itſelf diſplays ſome a morbid ſtate, being either mixed with a thick mucus, or tinged with blood; or it ſhows ſmall coa-

gula, intermixed with the diſcharge, that fall to the bottom.

DLIV. This diſeaſe is moſt common to children of a delicate irritable habit. It differs from that of age merely in its being leſs violent in its ſymptoms, and therefore admitting more ſpeedy relief.

DLV. This affection, though alarming in appearance, is merely of a temporary nature, and generally yields in a few weeks, on removal of its primary cauſe.

DLVI. The cure is to be attempted at firſt by diluents and emollients, in order to leſſen the action of the irritating cauſe, or the urine itſelf on the organ. When theſe fail, and the firſt ſtage of inflammation is paſſed, tonics, reſtringents, balſamics, and alkalies, will be all found effectual, on different occaſions, in completing a cure.

DLVII. Should the diſeaſe prove recurrent after being once cured, it has been known to yield to the golden rod, in infuſion, in moderate doſes.

Suppreſſion of Urine (Iſchuria Renalis).

DLVIII. Suppreſſion of urine, from impeded ſecretion, is known to occur, though a rare diſeaſe, in infancy; and the want of accumulation, or pain in the lower part of the belly, marks it from this cauſe.

DLIX. It is preceded by ſome fever, generally ſlight, and attended with diarrhœa and vomiting of a bilious nature: a ſuppreſſion or diminiſhed excretion of urine then comes on, which gradually increaſes for twenty-four hours, when the child is unexpectedly cut off.

DLX. The cauſe of this diſeaſe appears, by diſſection, to be inflammation, and its conſequences. The ſeat of it is found to be the meſentery, from the latter communicating to the kidneys.

DLXI. The treatment muſt be directed entirely to obviate inflammation, by the application of leeches to the belly, a bliſter to the ſacrum, and the repeated uſe of the warm bath, with occaſional laxatives and diuretics of a cooling nature interpoſed. In ſpite of theſe means, however, the diſeaſe will prove generally fatal.

Stone (Calculus).

DLXII. The ſtone is a diſeaſe particularly common to infancy, more ſo even than to adults. In the form of gravel, the ſymptoms are generally ſlight, and yield to ſome gentle emollient laxative, to dilution, or to ſome mild alkali.

DLXIII. If much pain ſhould attend this complaint, the warm bath or an opiate will be then proper, though they are ſeldom required. For more information on this diſeaſe, *vide* vol. II. p. 304.

Incontinence of Urine.

DLXIV. This is ſeldom, in infancy, a primary diſeaſe; but a conſequence of ſome other, as an affection of the bladder or ſpine. It is at times attended with violent gonorrhœa.

DLXV. One ſpecies of it, however, requires to be noticed, which takes place only in ſleep. This often continues for years during the growing ſtate, but is generally removed before the period of manhood.

DLXVI. The general treatment of this diſorder muſt be regulated by its cauſe.

DLXVII. In the acute ſpecies of it, bliſters to the ſacrum, and the uſe of tincture of cantharides in ſome ſoft emulſion, will often ſucceed; or aſtringents, as the catechu, bark, G. Kino, white vitriol, and ſome of the balſams.

DLXVIII. In the chronic ſpecies, abſtinence from fluid diet at night, daſhing the parts with cold water, and the uſe of the cold bath, are in general the beſt temporary means.

Exceſſive Thirſt (Polydipſia).

DLXIX. Polydipſia, or exceſſive thirſt, has occurred in ſome few inſtances as an idiopathic diſeaſe of infancy.

DLXX. It is attended with a diſcharge of urine equal to the exceſs of fluid drank; and the urine is of the ſame pale watery appearance as when the fluid is received.

DLXXI. This complaint is marked by no peculiar ſymptom, except laſſitude of the extremities. It ends, however, at times, in glandular affections, and atrophy.

DLXXII. During its continuance, the appetite is little impaired; but the withholding the fluids is attended with a nervous affection, riſing at times to the height of convulſion.

DLXXIII. In adults the ſame diſeaſe has been known to ſucceed fevers, and to continue for life.

DLXXIV. Little ſatisfactory can be offered reſpecting the treatment. A morbid ſtate, connected with weakneſs, in caſes of adult polydipſia, evidently exiſts: whether, therefore, tonics may be employed, or opening the ſkin, or any other ſecretion that may be diminiſhed, experience can only determine.

DLXXV. In infancy, the cure will perhaps be beſt truſted to time.

Inflamed Eyes (Ophthalmia).

DLXXVI. Children, at birth, are very ſubject to ophthalmia, which varies in its degree, obſtinacy, and ex-

tent. From the appearance of the diſcharge, three ſpecies of it are noticed, viz. the blood-ſhot, watery, and purulent.

DLXXVII. The firſt is of little conſequence, as well as a ſlight inflammation appearing for the three or four firſt days after birth. The uſe of a gentle aſtringent waſh, and additional heat by a flannel cap, is ſufficient to remove it.

DLXXVIII. The ſecond, or the proper ophthalmia, is marked by general inflammation of the eye as in adults, a thin acrid diſcharge, and incapacity to bear the light.

DLXXIX. Its progreſs is various, and its duration uncertain. On getting well, it is liable ſuddenly to recur, without any evident cauſe. It is relieved by diarrhœa, and ſeems often to alternate with affections of the bowels. When attended with much obſtinacy and frequent recurrence, it ſeems connected with a ſcrofulous diſpoſition.

DLXXX. In its treatment, the common means of obviating inflammation are to be applied; and if not yielding to gentle aſtringent waſhes, with attention to the ſtate of the bowels, the application of a leech to the temple, or a bliſter on the back, will remove the height of the inflammation. When frequently recurring, and becoming ſomewhat of a chronic nature, an aſtringent or mercurial liniment, inſerted every night betwixt the angles of the eye, will cure it.

DLXXXI. It is more the recurrence of the diſeaſe than the preſent obſtinacy of the fit that renders this affection ſo troubleſome.

DLXXXII. The third, or purulent ſpecies, is a more ſerious diſeaſe, and is chiefly diſtinguiſhed by the extent of ſwelling and the diſcharge.

DLXXXIII. The period of its appearance is either immediately at birth, or a few days after. No apparent cauſe precedes it, and it proceeds with rapidity either to deſtroy the eye entirely, or to impair the ſight of it.

DLXXXIV. The treatment here depends on the moſt active means of obviating inflammation that the infantine ſtate admits, by a looſe belly, the application of a leech, and even ſcarification of conjunctiva in certain caſes, and the application of bliſters to the back, nape of the neck, or behind the ears, which are to be kept open; in the laſt ſituation, as a perpetual drain. The eyelids themſelves ſhould be prevented from adhering, by inſerting ſome greaſy matter occaſionally betwixt them; and at night Goulard's ointment ſhould be applied, with an aſtringent poultice above, or compreſſes dipped in an aſtringent ſolution.

DLXXXV. The extent of theſe firſt means muſt be regulated by circumſtances of the age and apparent ſtrength of conſtitution. When complete relief is not received from them, they muſt give place in the progreſs of the diſorder, or as it paſſes into a chronic

ſtate, to ſtimulating applications, in the form of waſh and ointment.

DLXXXVI. The beſt of the former is the aqua camphorata, in the proportion ʒi. to ℥ii. of fluid, uſed by injecting a few drops frequently into the eyes, or waſhing the lids with it. The ſame may be done with the tinct. opii, diluted in the ſame way.

DLXXXVII. The principal form of ointment here is the nitrated mercury, which may be lowered in ſtrength, and applied at night to the lids.

DLXXXVIII. The progreſs of this complaint occaſions various degrees of derangement in the ſtructure of the eye, from ſimple thickening of parts to a total obliteration.

DLXXXIX. In many inſtances, though not always, this affection is found to partake of a venereal nature, as deſcribed under that diſeaſe, p. 121; and, in theſe caſes, the inflammation would ſeem equally active as that which has been known to ſucceed retropulſed gonorrhœa. When, from its obſtinacy, this cauſe is ſuſpected, and no other venereal ſymptom attends to elucidate it, ſmall doſes of calomel may be exhibited; or the ſarſa in powder, given in pap, or Ward's white drop, or a ſolution of corroſive. If theſe remedies give relief, there can then be no doubt of its cauſe.

Film or Speck (Leucoma).

DXC. This diſeaſe has been treated at large elſewhere (vol. II. p. 189). In children, as in adults, it is moſt frequent in a ſcrofulous conſtitution; and ariſes as a conſequence of effuſion during the progreſs of inflammation.

DXCI. At this time of life it is more ready to yield to the application of remedies; and various ſtimulants, cautiouſly employed and perſevered in for ſome months, have at laſt effected a cure. The remedies are, the aqua cupri ammon. in a drop or two, injected twice or thrice a day; the corroſive ſolution, or the nitrated ointment. The great point in their uſe is to regulate the extent of the inflammation.

Cataract (Cataracta).

DXCII. Cataract and gutta ſerena are not infant diſeaſes; they may, however, occur, under peculiar circumſtances, as congenite diſorders; and their conſideration is therefore neceſſary here.

DXCIII. If at all curable by the power of medicine, which is only at this period of life admiſſible, the age of the patient, as being moſt favourable, ſanctions the attempt.

DXCIV. The cure of cataract here is chiefly to be attempted by applications to the part. The calomel

and cicuta, and the other narcotic internal remedies, are not ſo properly admiſſible.

DXCV. The applications for this purpoſe are ſuch as produce a proper action or ſtimulus on the veſſels of the part; and this either by ſimple mechanical bruſhing or exciting them, as by a ſmooth bruſh applied ſeveral times in the day, or by producing tranſient inflammation of the part for the ſame purpoſe. This is effected by diluted æther by itſelf, or combined with the corroſive ſolution or oil of amber, the ſteams of oil of turpentine, &c.

DXCVI. To be effectual, much nicety is requiſite in the extent of their application, and experience of the time during which it ought to be continued.

DXCVII. In the gutta ſerena, nothing is to be done: both electricity, which has removed it in adults, and alſo errhines, are equally inadmiſſible here. When the child is a few years advanced, ſuch means may then have a trial; and the ſooner it can be ſafely done, and while the ſyſtem retains the irritability of childhood, the more powerful the application of any remedy may be expected.

Stye.

DXCVIII. Stye is a ſmall inflamed tumour generally of the under lid of the eye, and towards the noſe ſide. It is the conſequence of cold, and tends to ſuppuration; but it is ſlow in its progreſs, and, where not complete, it is ſucceſſively repeated till the eye-lid or gland is deſtroyed. To terminate the diſeaſe, on a ſup-

puration taking place, the eye-lid may be gently touched with cauſtic, or a ligature, if admiſſible, paſſed towards its baſe, to ſeparate the diſeaſed part.

Deafneſs.

DXCIX. Deafneſs is a common complaint with children, and ariſes from three cauſes:

1. Cold.
2. Induration of the ſecretion of the ear, or its deficiency; and,
3. Diſeaſed ſtate of the auditory nerve.

DC. In the firſt caſe it is merely temporary, and continues only for a few days. But at times ſome degree of inflammation or thickening of the membrane attends, when confinement, warmth to the part, and the uſe of laxatives, are requiſite. In obſtinate caſes, however, it does not always yield to theſe ſimple means, and time is often the only reſource.

DCI. In the ſecond caſe, or where induration of the ſecretion prevails, its removal by a ſyringe muſt firſt take place; and, when removed, the parts muſt be defended by warmth and emollients, as a little warm oil of almonds, or cotton, inſerted into the ear; and, where theſe means are not ſufficient, more ſtimulant remedies muſt be employed.

DCII. Where deficient ſecretion prevails, which is known by the apparent dryneſs of the part, it is to be obviated by either an artificial ſupply, or ſtimulating the veſſels to produce a natural ſupply.

DCIII. The firſt depends on the ſoap liniment, dropped into the ear, or a little oil of almonds and æther.

DCIV. The ſecond, or ſtimulating the veſſels, is effected either by inſerting the juice of onion or a roaſted or raw clove of garlic, covering carefully the part from the external air by adheſive plaſter, or by the application of a bliſter behind the ear, or the uſe of electricity either through the meatus auditorius externus, or the Euſtachian tube.

DCV. In the third caſe, or a diſeaſed ſtate of the nerve, little is to be done; but the uſe of electricity, errhines, and ſea-bathing, may be tried.

Canker.

DCVI. Canker of the mouth conſiſts in ſmall ſores affecting the mouth, the inſide of the lips, or the gums. It occurs at three periods: either after birth, when it forms a ſpecies of aphthæ (as in p. 39); or during the time of teething, when it ariſes from the irritation of the protruding teeth; or at the age of ſix or ſeven years, when the firſt ſet of teeth are changing; and it is at this time the worſt ſpecies of the diſeaſe appears, the whole gum diſſolving into foul ſores. It is conſidered as prevailing in ſome countries more than in others. It is a trifling complaint, unleſs when combined with poverty and improper nutriment.

DCVII. The treatment of this complaint conſiſts in

the uſe of local aſtringents and attention to the primæ viæ, with the removal of the cauſe of irritation when in our power.

DCVIII. Thus, if ariſing from dentition, the eruption of the teeth will relieve it; and, if from decayed ſtumps, their extraction will be ſucceſsful, when the uſe of local aſtringents will complete the cure.

DCIX. When a putreſcent tendency ſeems to advance in ſpite of theſe means, the bark and mineral acids will be proper.

Gangrene of the Cheek.

DCX. This diſeaſe is preceded by the appearance of a black ſpot on the cheek or lip, uſhered in with ſome degree of rigor or cold fit. This ſpot ſpreads faſt, and the parts diſſolve into ulceration without apparent marks of inflammation.

DCXI. Its progreſs extends, and the whole ſide of the face, even the lip itſelf, comes to be eaten away, ſo that the jaw-bone and inſide of the mouth are laid bare. Towards its termination, the lower jaw falls down on the breaſt, the affected part of the face is diſſolved into a putrid maſs; and, the uſual ſymptoms of colliquation coming on in a putrid diarrhœa, the child is cut off.

DCXII. In the treatment of this complaint, which is by no means frequent, antiſeptics form the chief remedies for a cure.

DCXIII. The ſaline draughts in the act of effervescence, and the muriatic acid diluted in ſome aſtringent or antiſeptic infuſion, have been found moſt ſucceſsful, joined to a nouriſhing diet, and the uſe of wine.

DCXIV. The ſame applications muſt be made locally, in the form of lotion and liniment, to the ulcerated parts.

DCXV. During the progreſs of the cure, the occaſional uſe of laxatives, as indicated, will be proper.

Swelling of Breaſts.

DCXVI. We formerly noticed the affection of this kind peculiar to infants immediately after birth, p. 14. The ſame occurs in female children as the breaſts begin to enlarge and expand, when they become painful, hard, and ſwelled. The ſituation of the hardneſs is chiefly the bottom of the breaſt, which is ſometimes looſe, at other times fixed: from this part ſevere darting pains are felt. It is often confined to one breaſt; or, leaving one, it ſeizes the other. It occurs moſt frequently, alſo, in ſcrofulous conſtitutions.

DCXVII. The treatment here conſiſts chiefly in giving time till the proper uterine diſcharge take place, with which the turgeſcence here is connected. The ſymptoms, in the mean time, may be alleviated by the uſe of emollients; but no danger attends the complaint, and its continuance will be productive of no injury.

Abſceſs of the lower Belly (Tumor Hypochondrii).

DCXVIII. Abſceſs of the lower belly frequently occurs as a conſequence of injury in the infantine ſtate. It is marked by the appearance of tumor in the *regio pubis*, attended with much tenderneſs and pain on preſſure; and it is generally preceded by alvine complaints, particularly *cholera*.

DCXIX. The treatment here conſiſts entirely in obviating inflammation, and effecting a termination of the diſeaſe by reſolution. The antiphlogiſtic plan is therefore to be employed; and leeches, bliſters, and fomentations, applied to the part. The bowels are to be opened by emollient laxatives and glyſters, and pain and fever abated by opiates and diaphoretics. When a tendency to ſuppuration takes place, this proceſs is then to be haſtened by the common poultice; and the matter, being once formed, is to be diſcharged as quickly as poſſible, without waiting the external prominence and diſcoloration neceſſary in common abſceſſes.

DCXX. The after-treatment conſiſts in the continuance of the common poultice, the uſe of gentle laxatives, and a light nouriſhing diet.

Lumbar Abſceſs.

DCXXI. Lumbar abſceſs we already conſidered in vol. II. p. 136. Though moſt common to the adult,

it occaſionally appears in infancy, and is then the effect of injury, and connected for the moſt part with a ſcrofulous habit.

DCXXII. The firſt ſymptoms are, a ſlight lameneſs and ſhortening of one leg, with a ſenſe of weakneſs in the loins. This changes to acute pain and tenſion, ſtriking down the thighs, with conſiderable heat and general fever. A tumor, at laſt, forms externally, either at the groin or ſide of the anus, without any external inflammation or change of colour.

DCXXIII. The chief point here is, to procure reſolution in the early ſtage; but this is generally paſſed before the cauſe is ſuſpected. Reſolution, however, may be attempted by the common means of topical bleeding, with leeches or cupping; of bliſters or iſſues; of emetics, ſo as to give a contrary determination to the impulſe of the fluids; of the warm bath, of cauſtics, and electricity.

DCXXIV. Should hectic ſymptoms have already taken place, and this primary ſtage be paſſed, the diſcharge of the matter forms then the only reſource, as directed in vol. II. p. 138.

DCXXV. The matter being fully diſcharged in the manner and with the precautions there taken notice of, the recovery is to be truſted to a nouriſhing diet and tonics, particularly the bark, ſteel, and acids.

White Swelling.

DCXXVI. This is a ſcrofulous affection, peculiar to infancy, or at leaſt more frequent during this period. It is fully treated in vol. II. p. 156, and nothing additional occurs to be offered here.

Curved Spine and Palſy of the Lower Extremities.

DCXXVII. This affection is moſt commonly the conſequence of previous injury, as well in adults as infants, though often overlooked, at the time, till the morbid effects make their appearance.

DCXXVIII. The ſeat of this injury varies, being either the neck, back, or upper part of the loins. Its firſt ſymptoms in children are irregular twitchings in the muſcles of the thighs, ſucceeded by diſlike to motion. An incapacity to move next takes place; along with it the extremities loſe much of their ſenſibility. This incapacity prevails in various degrees; but the uſe of the extremities, in time, comes to be totally loſt, and a remarkable rigidity of the ankles is at the ſame time conſpicuous.

DCXXIX. To prevent the progreſs of this affection, or remedy it entirely when it has occurred, the chief means found ſucceſsful are the formation of a drain contiguous to or on each ſide of the ſeat of the injury, and

the giving the parts above the injury ſuch ſupport as may relieve the ſeat of the diſeaſe.

DCXXX. The firſt is done by the inſertion of a ſeton in each ſide, or in forming an iſſue with the knife rather than the cauſtic, as deſcribed in vol. II. p. 107 and 368. This drain is to be continued till ſome time after the diſappearance of the diſeaſe, and is then to be gradually allowed to dry up.

DCXXXI. The ſecond is anſwered by the uſe of different machines, invented by different artiſts for the purpoſe, and worn during the exiſtence of the affection.

DCXXXII. Theſe means are to be further aſſiſted by the uſe of friction, cold bathing, and tonics; but the inſertion of the iſſue is the firſt and leading principle of treatment.

Simple Debility of Lower Extremities.

DCXXXIII. This is a complaint not very frequent. It is the effect of preceding diſeaſe, but it ſhows no marks, during its continuance, of being complicated with any other affection. The only ſymptom is the *debility itſelf*, gradually increaſing, till, in four or five weeks from its commencement, the uſe of the limbs is entirely loſt.

DCXXXIV. The indications of cure are to reſtore

energy to the parts, and give them ſupport during the continuance of the diſeaſe.

DCXXXV. The firſt is done by bliſters and cauſtics to the ſacrum, and ſtimulant applications to the legs and thighs.

DCXXXVI. The ſecond conſiſts in the uſe of irons, to ſupport the legs, and enable the patient to walk. Theſe irons muſt be worn till after recovery takes place.

Debility, with Diſcoloration.

DCXXXVII. This differs from the former in being, apparently, a general affection of the ſyſtem. The children become weakly, and drag their legs after them; the head enlarges, the limbs become emaciated, and over the whole there appears a deep leaden blue colour.

DCXXXVIII. The operation of no external cauſe ſeems evident in producing this morbid ſtate.

DCXXXIX. The only means of relief pointed out by the ſymptoms are cordials and tonics, a generous diet, the bark, after opening the primæ viæ, tepid ſea-bathing, which is preferable to cold, and the application of friction and warm embrocations to the ſurface.

Curvature of Bones without Injury.

DCXL. This ſtate of the bones, the effect of rickets and other diſeaſes, requires a ſeparate conſideration in regard to its particular treatment. The treatment, in all caſes, is the giving ſupport by machines, till the curvature is taken off; and, till this curvature is taken off, no means of ſtrengthening the ſyſtem, ſo as to preſerve the bones in their improper ſhape, ſhould be uſed. Hence the impropriety of cold bathing till this end be effected.

Whitlow (Paronychia).

DCXLI. This affection we already conſidered in vol. II. p. 136. In a mild, or ſuperficial form, it is liable to repeat its attacks frequently in young perſons: its prevention, therefore, becomes an object of attention; and this is chiefly effected by frequent bathing of the part in an aſtringent anodyne ſolution, ſo ſoon as the firſt ſymptoms of attack are felt.

Boil, or Inflammatory Tumor (Furunculus).

DCXLII. Boils, in different parts, are a frequent affection towards the age of puberty. They are generally conſidered of a ſalutary tendency, and readily yield to

a common poultice and ſlight ſuppurant applications. A purge or two commonly ſucceeds their healing.

Chilblains.

DCXLIII. Chilblains we already conſidered in vol. II. p. 141; little, therefore, occurs to be added here. As they are entirely the effect of extreme cold, in their treatment a gradual change in the temperature of the part ſhould only be permitted; hence the propriety of the firſt applications being ice, ſnow, ſolutions of ſalt, &c. Where the child is prediſpoſed to this affection, coiled ſilk ſhould be worn on the part, and this covered with a proper defence of leather, as the beſt preventative.

Burns.

DCXLIV. Infants are equally expoſed to this accident as adults, and in them the tendency, from the exceſs of inflammation attending it, to gangrene, is greater. Nothing, however, can be added to the obſervations detailed in vol. II. p. 62, on this ſubject.

DCXLV. In ſlight caſes, the uſe of aſtringent ſolutions will ſoon complete a cure; as, diluted brandy, or other ſpirit, ink, wine, ſaturnine lotions, &c.

DCXLVI. In ulcerated caſes, the frequent renewal of ice, or a lotion of lime-water, the ſaturnine lotion and brandy, or a ſtrong ſolution of ſoap, or a liniment of

olive oil, cold water, and ley, afterwards dreſſing with linſeed oil or Turner's cerate, will be equally effectual.

External Injuries of Bones.

DCXLVII. Such accidents are apt to occur both during the progreſs of birth, and alſo at any period of infancy. They are divided into two kinds, Luxations and Fractures.

DCXLVIII. The two ſituations of the firſt are the ſhoulder, and perhaps lower jaw.

DCXLIX. The ſhoulder, in children, ſo ſoon as it is known, is eaſily reduced; and little elſe is neceſſary, in the after treatment, than keeping the part from motion.

DCL. The lower jaw, when diſlocated, will give an awkward appearance, and alſo prevent the child receiving any nouriſhment till reduced. This is done in the manner deſcribed in vol. II. p. 356; and the after treatment requires to avoid exertion of the parts, as much as poſſible, for ſome time.

DCLI. Fractures, the other ſpecies of injury, are confined to the collar-bone, the arm, and the leg.

DCLII. The collar-bone is treated by drawing the ſhoulders back, by their confinement in that poſture by pinning them to the clothes, and by the application of

a piece of adhefive plaifter, fpread on leather, over the injured part.

DCLIII. Fracture of the arm is treated by a proper apposition of the ends of the bone to each other, as in the adult, and then retaining them in that fituation. But in infancy this muft be done without much tightnefs; and, for this purpofe, three fplints may be formed out of linen, repeatedly folded, perhaps five or fix times, each half an inch wide, and one inch and a half long; and, being foaked in flour and white of egg, before their application, they will acquire fufficient firmnefs to fecure the pofition of the part. They fhould be applied next the fkin, and at firft wet, fo that, on drying, they will be accommodated to the fhape of the member. Over them a flannel roller is to be applied, rather loofely, and the confinement of the arm trufted to pinning it clofe to the fide, by ftrong pins, to the child's gown, which will beft fecure it. It need only be opened in ten or twelve days, and will be completely cured within the month.

DCLIV. Fracture of the leg is treated in the fame manner as fracture of the arm.

Morbid Adhefion of Tongue.

DCLV. An undue extenfion of the frænum beyond its proper limits, pinning down the tongue, as it were, occafionally occurs, but not fo frequently as the operation for its removal is called for.

DCLVI. The manner of performing the operation we already deſcribed in vol. II. p. 252. When much called for, it may be performed, though not ſtrictly neceſſary; at the ſame time, ſome caution is required in doing it, and even fatal accidents have ariſen in conſequence.

DCLVII. The accidents from this cauſe are ſwallowing of the tongue and hæmorrhage.

DCLVIII. Swallowing of the tongue is known by the uſual ſymptoms of ſuffocation. The child ſuffers much agitation: the attack is ſudden. The face turns black; and convulſion, unleſs ſleep is obtained, ſoon takes place, and proves fatal.

DCLIX. The treatment conſiſts in reſtoring the tongue to its place, and applying the child to the breaſt; and, when ſucking is over, attention is to be paid to the ſtate of the hæmorrhage; for it is the feeling the hæmorrhage that tempts the child, by ſucking, to ſwallow the tongue.

DCLX. The hæmorrhage, if conſiderable, is beſt ſtopped by an inſtrument in the ſhape of a fork, the prongs of which are ſo placed as to preſs on the ſublingual veins, and the other end of it againſt the lower jaw. This inſtrument is the invention of Mr. Petit. Such accidents ſeldom attend the operation when neceſſary at preſent.

Hiccough.

DCLXI. Hiccough forms a mild ſpecies of convulſion, to which infancy and childhood are much ſubjected.

DCLXII. It ariſes, in infancy, either from over diſtenſion or predominant acidity. In the firſt caſe the cauſe ſoon ceaſes; in the other it is generally connected with abdominal complaints, and yields to the uſe of abſorbents or external ſtimulants.

DCLXIII. In childhood, again, where more habitual and permanent, it will give way, as ariſing from ſimple irritability, to the uſe of the citric acid or vinegar, or any powerful ſuſpenſion of the feeling at the time, in the way of ſurpriſe or alarm; though the employment of this laſt means requires ſome caution.

Bleeding at the Noſe (Epiſtaxis).

DCLXIV. This complaint is generally ſymptomatic, till the age of puberty.

DCLXV. In the acute diſeaſes of children it is reckoned a favourable ſymptom, and generally gives relief.

DCLXVI. When accidentally occurring at other times, from over exertion on the part of the child, it

will prove equally ſalutary; but, wherever it is over profuſe, and the common medicines fail, it is to be treated as directed in vol. I. p. 51, or in vol. II. p. 215; though the latter will never, in children, be neceſſary.

Affections of Navel.

Hæmorrhage.

DCLXVII. Bleeding, or a rawneſs, is apt to ariſe on the ſeparation of the cord. It is the effect of a ſoft fungus, preventing the ſkin ſtretching, as uſual, over the mouths of the veſſels.

DCLXVIII. This hæmorrhage is often conſiderable, and frequently returns, ſo as to affect, in the end, the health of the child.

DCLXIX. The ſituation of the veſſels admits neither the uſe of cauſtic nor a ligature. It muſt be truſted, therefore, entirely to compreſſion.

DCLXX. This compreſſion is beſt made by a compreſs, or elſe doſſil, of lint, applied over the bleeding part, and ſecured by ſticking-plaſter and a bandage, or the ſticking-plaſter alone may be applied, as directed, to relieve the umbilical hernia.

DCLXXI. Hæmorrhage, too, is alſo apt to ariſe in conſequence of a weak or diſſolved ſtate of ſolid, after the cord is entirely healed. In this caſe it will yield to the uſe of ſtyptics and compreſſion.

Ulceration of Navel.

DCLXXII. Beſides hæmorrhage, the navel is ſubject to ulceration, from the improper ſeparation of the cord. This ſtate generally yields to the common remedies: a bit of ſinged cloth, the application of abſorbents, or a toaſted raiſin; and, when more ſevere, the uſe of a cabbage-leaf will effect the re-union.

DCLXXIII. But in many caſes, after it is entirely healed, this part is apt to excoriate, and paſs into ulceration. It is then attended with much thin diſcharge, which diſappears and returns irregularly, together with a raw look of the part, which is not many days in this ſtate, but continues to ſpread. This complaint is particularly connected with the ſtate of the primæ viæ, and an attention to it forms one of the leading indications in the cure. The part itſelf ſhould be touched with ſome cauſtic, as the argentum nitratum, or blue vitriol; or ſome abſorbent, as the chalk, or lapis calaminaris, and then covered with a common, or a ſaturnine poultice, or cabbage-leaves. It generally yields to this treatment in the courſe of five or ſix weeks.

DCLXXIV. But a peculiar ſpecies of ulceration, different from this, and more extenſive in its nature, remains to be deſcribed. This ulceration is the conſequence of preceding diſeaſe, and of courſe of a certain debility induced by it. It ariſes in the part, though formerly completely healed, and often at the diſtance

of five or six months, and spreads over a great part of the abdomen, tending, in its progress, to gangrene.

DCLXXV. The indications pointed out for its cure are, a powerful use of cordials and antiseptics, as the bark, wine, and acids, in every form, both internal and external; but, in spite of these means, the disease is generally fatal, and but few cases of recovery have hitherto occurred.

Imperfect Separation of the Cord.

DCLXXVI. By this is meant, where the cord separates at the place of the ligature, and does not shrink sufficiently near the umbilicus. Wherever this, which is very rare, occurs, as part of the cord may be said still to exist, and to convey a disagreeable appearance, a new ligature is to be put on this remaining part, so as to make it shrink close to the navel, as it ought.

Swelling of the Prepuce.

DCLXXVII. This complaint, when not the effect of inflammation or irritation, from stone, is properly an anasarca, or dropsy of the part.

DCLXXVIII. It is preceded by a copious discharge of a soft soapy matter from the surface, which goes away with the swelling.

DCLXXIX. The treatment conſiſts in antiphlogiſtic fomentations, or poultices, or elſe ſlight ſcarifications of the part, to which means it generally yields.

Falling down of the Gut (Prolapſus Ani.)

DCLXXX. This complaint we examined in vol. II. p. 327, as occurring in the adult. In infancy it is the effect of debility or irritation; and, in order to its treatment, the cauſe muſt be removed to which it is owing.

DCLXXXI. It is then eaſily cured by aſtringent lotions, as compreſſes, dipt in wine, applied to the part, ſaturnine applications, made in the ſame manner, &c.; or, when the diſeaſe is of long ſtanding, injections may be made into the anus, as a decoction of oak-bark and alum, &c.

DCLXXXII. Where the prolapſus cannot be eaſily returned, on account of inflammation and ſwelling, a ſaturnine injection, with a proportion of laudanum, ſhould firſt be made, and then the reduction attempted, when the anodyne begins to take effect.

DCLXXXIII. Children with this complaint ſhould lie hard, and their feet not touch the ground; and, when they walk abroad much, the part ſhould be ſupported by a ſuſpenſory.

Diſcharge from the Vagina.

DCLXXXIV. The nature of theſe diſcharges preceding puberty, is various, being either bloody, mucous, or purulent.

DCLXXXV. The firſt of theſe appears a few days after birth, and is of no conſequence, nor requires any particular treatment.

DCLXXXVI. The ſecond, or the mucous, ſhows itſelf at the age of five or ſix, in conſiderable quantity, often reſembling the fluor albus, and is tinged with blood. It readily yields to the bark and the balſam capivi.

DCLXXXVII. The third, or the purulent, occurs in children of three or four years old. It alſo occurs, accidentally, later, and is then more fœtid in its appearance, and of a ſuſpicious nature, to thoſe unacquainted with the real diſeaſe; and, in forming a judgment at this period of life, much caution is neceſſary, not to be led away by raſh and unjuſt ſuſpicions. The diſeaſe readily yields to ſaturnine applications, in the form of lotion and ointment, and that in the courſe of eight or ten days. Wherever it is obſtinate, it will yield to a ſhort uſe of ſaline ☿, in the form of the corroſive ſolution, or Ward's white drops, or to the bark, and ſome of the balſams.

Contaminated Wounds.

DCLXXXVIII. This ſubject we formerly treated in vol. II. p. 65. Children are particularly expoſed, from the delicacy of their ſkins, to the bites of ſmall animals or inſects, and domeſtic applications, therefore, ſhould always be at hand to relieve them.

The common applications are mixtures of ſpirits, vinegar, and oil; or of camphorated ſpirit, vinegar, and laudanum; or what is preferable, if it can be got, ice, applied for half an hour at a time to the part, and repeated every three or four hours.

For the bites of the viper and other large animals, the remedies of olive oil, eau de luce, and volatile alkali, are well known.

Congenite Diſeaſes.

DCLXXXIX. Congenite diſeaſes are ſuch as are coeval with or precede birth; and they conſiſt of either the deficiency, redundance, or imperfection, of parts.

DCXC. The firſt of theſe affections is a deranged circulation or imperfect change; by the fœtal ſtate, in this reſpect, partly continuing. This peculiarity conſiſts either in a ſtricture of ſome part of the pulmonary artery, or in the communication remaining open either between the ſeptum cordis, or that at the foramen ovale, or canalis arterioſus.

DCXCI. The ſymptoms of this affection are, a diſcoloration of the face and neck, with a dark blue or leaden colour of the lips. The period of their appearance is ſoon after birth; and they continue to increaſe, attended with difficult reſpiration on motion; neither are the ſymptoms relieved by any means employed but confinement to one poſture.

DCXCII. The cauſes of this diſeaſe depend on either mal-conformation, or deficient ſtrength in the powers of the ſyſtem to complete the natal circulation. The period when theſe changes ſhould take place is certainly from the firſt moment of birth at leaſt: if we judge from the morbid effects that the want of completion of the natal circulation ſhows, it muſt be in a very ſhort time.

DCXCIII. The prognoſis to be formed in ſuch affections is always unfavourable; though the exact period of it varies in different caſes.

DCXCIV. Nothing can be attempted in the way of treatment but to avoid whatever hurries the circulation; and every attempt, therefore, at ſudden motion, ſhould be ſtrictly guarded againſt.

Deficiency of Cranium.

DCXCV. Various inſtances of this affection appear, and form, therefore, various degrees of monſtroſity, which are incompatible with the continuance of life.

The moſt common ſpecies, however, is a defect of the cranial bones, at the fontanelle or future, termed by ſome authors hernia of the brain, from the protruſion formed of the brain at theſe parts.

DCXCVI. In this ſpecies the child continues to live. Its appearance is that of a round tumor, of various ſize, ſeldom exceeding a ſmall egg, without fluctuation or diſcoloured ſkin, and attended with ſome degree of pulſation correſpondent to the ſynchroniſm of the brain, of which it forms a part, with the pulſe. It diſappears or yields greatly to preſſure.

DCXCVII. It is chiefly by its want of fluctuation, by the effect of preſſure, and by its pulſation, that it is diſtinguiſhed from other tumors in this ſituation.

DCXCVIII. When once aſcertained, its cure is eaſily effected, which conſiſts in a gradual application of compreſſion. This is done by means of a piece of thin perforated lead attached to the child's cap; and, in making the compreſſion, attention muſt be paid not to excite pain or diſturb any of the functions. By this gradual procedure the tumor will diſappear or retire within the cranium, and the void ſpace be elongated by the progreſs of growth, ſo as to cloſe up the cavity from which it protruded.

DCXCIX. But tumors of an external ſpecies are more common in this ſituation than protruſions of the brain; and ariſe from two cauſes, compreſſion and malconformation.

Partial.

DCC. The firſt to be noticed is one conſpicuous at birth on the cranium, reſembling in ſize an egg, and of a round form, with the ſkin diſcoloured.

DCCI. It moſt frequently appears in the caſe of a firſt child. Its duration is various, and depends much on the proper application of remedies to reduce it.

DCCII. The treatment conſiſts in the uſe of aſtringents, compreſſion, or puncture, each of which is proper under various circumſtances.

DCCIII. The firſt are commonly applied immediately after birth, and conſiſt of fomentations of warm red wine or diluted brandy and vinegar; and, if theſe means prove ſucceſsful, they commonly ſubſide in a few days.

DCCIV. The ſecond, or compreſſion, is made with a piece of thin packing-box lead, folded up in linen, and kept conſtantly on the part.

DCCV. The third is only to be attempted where the former means fail, when the ſwelling daily increaſes from the increaſing accumulation of its contents; and when opened, and the bloody collection diſcharged, it will then yield to the firſt mode of treatment, or the uſe of aſtringents.

General.

DCCVI. Another ſpecies of this tumor occurs to be mentioned, more extenſive, leſs elevated, and without diſcolouration. It often occupies a third part of the ſcalp, ſucceeds the eaſieſt labours, and ariſes from ſome rupture of ſerous, not red veſſels. It generally ſubſides in the courſe of the month by the abſorption of its contents, and often in ſo rapid a manner that its diminution is daily viſible.

DCCVII. To aſſiſt this abſorption, when ſlow, the action of the veſſels may be excited by warm embrocations with vinegar, ſal ammoniac, or camphorated ſpirits. Compreſſion may alſo be employed, and promoting ſome diſcharge by the inteſtines.

DCCVIII. Of tumors from mal-conformation, the moſt frequent that occurs is what has been termed the ſpina bifida.

DCCIX. Such tumors poſſeſs a ſenſible fluctuation, contain a lymphatic matter, and are formed by a part of the medullary membrane.

DCCX. Their ſituation is always in ſome part of the ſpine; moſt commonly the lower part of the neck or upper part of the ſacrum.

DCCXI. Their appearance varies at birth, either according as they have been previouſly ruptured, or as they remain entire.

DCCXII. In the firſt caſe it forms an ulcer, marked by a prominent edge and depreſſed centre.

DCCXIII. In the ſecond caſe it exhibits a tumor of various ſize, from that of a pea to half a crown, more or leſs elevated, exceedingly thin and tranſparent above, and red and livid below. The ſurface feels ſoft, and its fluid retires on preſſure. The edges of the ſpine may alſo be found round its margin. In other caſes it forms a hard thick fleſhy ſubſtance, producing convulſions when much preſſure is applied to it.

DCCXIV. This affection depends on an imperfect conformation of the part, in general a deficiency of bony ſubſtance, and a collection of ſerum forms within the ſpinal medullary covering: ſometimes the ſpinal marrow at that part is wanting.

DCCXV. The effects of this conformation are various. In ſome caſes, children ſeem to have been little affected by its preſence; in other inſtances, various ſpecies of diſtortion are combined with it.

DCCXVI. Frequently it is entirely local. In other caſes, the fluid ſeems to have a connection with the brain; and, on preſſure of it, morbid ſymptoms of reaction appear in the head.

DCCXVII. Its fatality depends on its giving way either artificially or by accidental rupture. In the latter caſe a little gangrenous ſpot, or ſlough, forms at one point generally the thinneſt ſpot; which, ſpreading

wider and deeper, at laſt opens a way for the eſcape of the lymph.

DCCXVIII. On this taking place, the child generally dies in a few days, moſt commonly the third. If the parts, however, cloſe again, life is protracted ſomewhat longer.

DCCXIX. Hectic ſymptoms, alſo, often precede the rupture of the teguments; which increaſing rapidly on the rupture, the child becomes convulſed, and is ſuddenly cut off.

DCCXX. Life is ſeldom protracted under this diſeaſe above a few weeks. The rupture of the tumor is the critical period; yet ſome inſtances have been known of the child ſurviving above a twelvemonth; but it forms a very ſingular occurrence.

DCCXXI. From the general fatality of this diſeaſe, little can be attempted in the way of cure.

DCCXXII. Puncture and preſſure have been lately recommended; but to this many objections ariſe, and the facts of authors ſtrongly oppoſe it. But though puncture is always inadmiſſible, preſſure may be proper to a certain extent, with a view to prevent the rupture of the teguments, and thus to ſuſpend as far as poſſible the fatal event.

DCCXXIII. This preſſure will ſucceed beſt in theſe caſes where the tumor is low down on the ſacrum, where it does not ſeem to affect the head by any repul-

ſion of the fluid; and with this preſſure the uſe of aſtringent powders ſprinkled on the part, as the armenian bole, catechu, and alum, may be conjoined.

DCCXXIV. Wherever this preſſure ſeems to produce or increaſe the morbid ſymptoms, it ſhould be then laid aſide, and the treatment truſted then entirely to the uſe of the aſtringent powder and lotion, with a view to preſerve the teguments.

DCCXXV. Soft poultices have been recommended by ſome authors; but their effect can only be to haſten the event; neither does ſuch a degree of inflammation attend as to render them neceſſary in order to obviate this ſymptom.

Parenchymatous.

DCCXXVI. Spongy vaſcular tumors appear in the ſame ſituation at birth as the former, but without any affection of the bone, or receſſion of their fluid on preſſure. They have been termed by authors parenchymatous, a term not altogether proper.

DCCXXVII. The treatment here conſiſts either in the uſe of aſtringents and preſſure, as the Armenian bole, catechu, &c. ſprinkled on the part, and a piece of thin lead made to cover it, or in extirpation of the tumor altogether. In doing this, attention is required to the hæmorrhage, as a good deal of blood is frequently loſt.

Congenite Hernias.

DCCXXVIII. The ventral hernia of this period is a rare occurrence. The ſpecies of it termed hepartomphalus has been known in the living ſubject; and even the child has been known to ſurvive, and the liver been retracted into its ſituation in the courſe of a certain time. In the way of treatment, nothing can be done but leaving the proceſs to nature, by keeping the tumor eaſy, and counteracting any tendency to gangrene.

DCCXXIX. The navel hernia, or exomphalus, appears at times ſoon after birth; and, if immediately attended to, is eaſily cured by cold bathing. When neglected, it proves extremely troubleſome, eſpecially to the female ſex; and, for its treatment, a proper compreſſion of the part becomes neceſſary.

DCCXXX. This is done in various ways, ſuited to the period of life and the ſtage of the diſeaſe.

1. By a compreſs made of ſticking plaſter, with a bit of card interpoſed.

2. By a bit of bees' wax formed into the ſame ſhape, and applied in the ſame way.

3. By ſtraps of adheſive plaſter applied ſtar-ways acroſs the navel, ſo as to bring the parts fully together, and occaſionally renewed when giving way; or,

3. By Squirel's elaſtic bandage.

DCCXXXI. A prediſpoſition to this affection pre-

vails in thoſe children in whom the ſkin of the belly extends far upon the navel-ſtring.

DCCXXXII. Ruptures in the groin are more dangerous than the umbilical. They readily yield, however, to cold bathing, and ſeldom even require the aſſiſtance of a bandage. In ſome caſes, where the ſwelling gets large, and where the child is liable to fits of crying, a ſteel truſs may be neceſſary; but it is both difficult in its application, and it requires much attention, when applied, to mark if it continues properly placed, and does not injure the parts.

DCCXXXIII. When the child is more advanced, that is, after two years, ſhould the rupture ſtill continue, a truſs may be highly uſeful; and the cure of every rupture during infancy will be much expedited by the uſe of cold bathing.

DCCXXXIV. It is ſeldom in infancy that ſtrangulation takes place. Should it happen, its chief ſymptom will be the rejection of every thing by the ſtomach. In all caſes of vomiting, therefore, this cauſe ſhould be ſuſpected; and, if joined to a heat and ſwelling of the part, hernia is then the ſource of the evil, and its replacement muſt be attempted the ſame as in adults, directed in vol. II. and the bowels alſo opened by injections and laxatives, as there recommended.

Congenite Hydrocele.

DCCXXXV. Hydrocele, in infants, is generally coeval with birth. It is diſtinguiſhed by the tranſparency of its tumor, by its want of pain, by its not retiring on preſſure, nor its being enlarged by crying.

DCCXXXVI. The cauſe of this affection is either relaxation or injury of the part.

DCCXXXVII. Its treatment is very ſimple, and it readily yields to the uſe of any aſtringent lotion, as a compreſs of vinegar and water, or Mindererus' ſpirit, applied to the part, and occaſionally renewed. If any caſe more obſtinate than common occurs, the treatment recommended in adults, vol. II. p. 277, may be attempted.

DCCXXXVIII. In no caſe, when once removed, does the hydrocele of infancy return.

Congenite Imperfections of Parts.

Of Vagina.

DCCXXXIX. Imperforation of the vagina occurs, at times, in different degrees, and is divided into the external and internal. The former conſiſts ſimply in the expanſion of the hymen, which, at the age of puberty, when entire, requires an operation, as already deſcribed in p. 12.

DCCXL. The latter, or internal, consists of a fleshy mass, filling up the cavity, for which there is, in general, no relief.

DCCXLI. Besides imperforation, the aperture of the vagina is often, naturally, so small, as to require an operation for its enlargement with the point of a lancet, dividing the line of its apparent extent, and keeping the parts open with a piece of fine lint, or sponge, for a few days; or, instead of the lancet, the enlargement may be simply made with the fingers, and a little oozing of blood will follow the operation.

DCCXLII. It is, on all occasions, proper to examine this circumstance of the aperture of the vagina, in order that, when a defect takes place, it may be timely perceived, and relief afforded previous to the age of puberty.

Of Anus.

DCCXLIII. This defect we examined fully in vol. II. p. 328, and pointed out the means of relief, so that nothing new remains to be added here.

Of Penis.

DCCXLIV. Imperforation takes place here in various ways. The first is when the urethra is simply choaked with mucus, the washing out of which with

warm milk and water, and the inſertion of a probe, will be ſufficient to remove it.

DCCXLV. The ſecond is when the urethra is wanting for the extent of the glands. Here the introduction of a ſmall trecar, till it meets the natural opening, will be ſufficient; and this perforation muſt be kept open till healed on a bougie.

DCCXLVI. The third is the opening of the urethra taking place on the under part of the glands, or at one ſide. Theſe defects will all admit being remedied; and, in doing this, much muſt depend on the judgment of the operator.

DCCXLVII. The fourth is the penis drawn downwards, or to one ſide. Here the ſkin, where too tight or ſhort, muſt be divided, and the edges kept at a diſtance till the ſore is healed.

Of Lips.

DCCXLVIII. The hare-lip is the chief defect of this part, which we already conſidered fully in vol. II. p. 233.

Of Ears.

DCCXLIX. Defects here are generally incurable.

Of Eyes.

DCCL. The moſt common defect of viſion in young children is that of ſquinting. It is either coeval with birth, the effect of diſeaſe or convulſions, or elſe it is a deformity acquired by habit. In the two firſt caſes it is generally incurable.

DCCLI. In the laſt it admits a cure, by drawing the diſtorted eye in a right direction by the attraction of ſome bright colour, as a piece of bright-coloured ſilk on a bit of plaſter, placed towards the noſe or temple, always oppoſite, according to the ſituation of the diſtortion. Where both eyes are diſtorted, the uſe of goggles will anſwer the ſame purpoſe, or an opake covering with a ſmall aperture, which ſhould be worn ſo long as the bad habit remains.

Of Feet.

DCCLII. The feet are found at birth diſtorted in various directions, which have received different appellations.

DCCLIII. The method of treatment is the ſame in all caſes, viz. the application of a gradual preſſure in the oppoſite direction to that of the diſtortion, and this made by means of a machine conſtantly worn for the purpoſe.

Original Marks.

DCCLIV. Marks of various kinds alſo appear at birth, and disfigure various parts of the external ſurface. So far as relief can be obtained by ſurgery, this ſubject is treated in vol. II. p. 146. It is clearly the effect of malconformation, and no way imputable to the imagination of the mother, as ſhe can have no influence or power in their production.

AN

INFANTILE PHARMACOPŒIA;

DIVIDED INTO

THREE PARTS,

viz.

MATERIA MEDICA, CLASSIFICATION,

AND

EXTEMPORANEOUS PRESCRIPTION.

PART I.

MATERIA MEDICA

CONTAINING

THE ACTIVE REMEDIES

In Present Practice,

SIMPLE, COMPOUND, AND CHEMICAL,

WITH THEIR DOSES.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Absinthium. Wormwood.	Tops.	℈ ss. to ʒi.	Sal. Absinthii,	gr. v.
			Tinct. Absinthii,	ʒi. to ʒij.
Acetum Vini. Vinegar.			Sal Aceti.	
			Syrup. Aceti,	ʒi.
			Serum. Acet. ad libitum (ʒi. Acet. ad lb.i. Lact.)	
Acidum Vitriolicum. Vitriolic Acid.			Sp. Vitriol. tenuis, gtt. x. to xx. *vel Acid. Vitriol. dilut.*	
			Sp. Vitriol. dulcis, *vel Sp. Ætheris Vitriol.*	ʒi.
			Sp. Æther. Vitr. gutt. xxx. *vel Æther. Vitriolius.*	
			Elix. Vitr. Acid. gutt. xxx. *vel Acid. Vitr. Aromat.*	
			Elix. Vitr. dulc. gutt. xxx. *vel Sp. Æth. Vitr. Arom.*	
Acid. Muriatic. Muriatic Acid.		gutt. xii. ter de die.		
Acorus. Sweet Flag.	Roots.			
Ærugo, vel cuprum acido aceto. rof. Verdigreafe.			Ung. Ærugin.	
			Aqua Sappharina. *vel Aqua Ærug. ammon.*	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Allium. Garlic.	Root.	3ff. dried.	Syrup Allii,	ʒ ij. to ʒff.
			Oxymel Allii,	ʒff. to ʒ vi.
Aloe. Aloes.		gr. iij to ʒff.	Tinct. Sacra,	ʒij. to ʒff.
			vel Vinum Aloeticum.	
			Pil. Aloetic.	
			vel Pil. Aloes cum Myrr.	
			Pil. Rufi,	℈i. to ʒff.
			Elix. Proprietatis,	gutt. xv. to ʒi.
			vel Elix. Aloes cum Myrr.	
			Elix. Proprietatis Vitriolici,	gutt. xv. to ʒi.
			vel Tinct. Aloes vitriol.	
Althea. Marshmallow.	Leaf and root.	℈i. to ʒff.	Decoct. Altheæ,	lb.ij. indies (ʒi. to lb.i.)
			Syrup. Altheæ,	ʒi. sæpe.
Alumen. Alum.		gr. iv. to ℈i.	Pulv. styptic.	gr. x. to ℈i.
			vel Pulv. Alum. comp.	
			Serum Alumin.	ʒiv. to lb.ij.
			Coag. Aluminos.	
			Aqua styptic.	
Amygdalæ amaræ. Bitter Almonds.	Kernel.	gr. iv. to ℈ff.	Ol. Amygd. Amar.	
Amygdalæ dulces. Sweet Almonds.	Kernel.	ad libit.	Ol. Amygdal.	ʒi. to ʒij.
			Emulsio cois,	ad libit.
Amylum. Starch.			Mucilago Amyli,	ʒi. sæpe.
Anethum. Dill.	Seed.	℈i. to ʒi.	Ol. Anethi,	gutt. iij.
			Aq. Anethi,	ʒij. to iv.
Ammoniacum. G. Ammoniac.		℈i. to ʒi.	Lac Ammon.	ʒi. sæpe.
			Emplast. Ammon.	
Anguſtura	Bark.	℈i. to ʒi.	Decoct. Anguſt.	lb.ij. indies.
			Tinct. Anguſt.	ʒi.
Anisum. Anise.	Seed.	gr. iv. to xv.	Ol. Anisi,	gutt. iij.
			Aq. Anisi,	ʒij. to iv.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
timonium, *vel Antimon. Preparat.*			Crocus Metallor.	gr. i. to vi.
ntimony.		gr. v. to ʒi.	Sulph. Aurat. Ant. *vel Crocus Antimonii*	gr. iv. to xvi.
			vel Sulphur. Antimonii præcipitatum.	
			Pulv. Antimon.	gr. iij. to vi.
			Calx. nitrata Ant. *vel* Pulv. Jacob. *vel Antimon. ust. cum Nitro.*	gr. v. to xii. ter indie
			Tartarus Emeticus, *vel Antimon. tartarisat.*	gr. i. to vi.
			Vinum è Tartar Emetic. *vel Vin. Antimon. tartarisati.*	gutt. xv. to xxx.
			Vin. Antimonial. *vel Vin. è Tartar Antim.*	gtt. v. to ʒss.
abicum.			Trochisci albi,	ad libit.
am. Arabic.		ʒij.	Mucilago Gum. Arabic. ad lb. i.	ʒiv.
			Emulsio Arabic.	ad. libit.
Sfoloebia tenuis. Root. thwort.		ʒi. to ʒij.		
nica.	Herb, flowers, and root.		Decoct. Arnicæ, (ʒi. flor. lb.i.)	lb.i. indie.
			Extract. Arnicæ,	ʒij. to iv. indies.
opard's bane.		ʒi. to ʒi.		
Senicum. enic.		gr. ½ to iij.	Solut. Arsenic. (gr. iv. to lb.i.)	a table spoonful.
m. ke-robin.	Root.	ʒss. to ʒi.	Pulv. Ari comp	ʒi. to ʒi

Simpl.	*Parts us'd.*	*Dos.*	*Compound Medicines.*	*Dos.*
Allii-fativi		gr. x. to ʒ ss.	Pil. Gam.	℈i.
			℞ *Pil. Allii-fativi*	
			Tinct. foetida.	gutt.
			℞ *Tinct. Allii-fativi.*	
Alsine.	Leaves.		Pulv. fternutat.	℈i. to ʒi
			℞ *Pulv. Alsine.*	
Asarabacca.		℈ ss. to ʒi.		
Aurant. Hesperid.	Leaf, flower, juice of fruit, & outer rind.		Aq. Cort. Aurant.	ʒij. to iv
			Syrup. Cort. Aur.	ʒi
			Conferv. Aurant.	ad. l.
			Ol. Neroli.	
Seville Orange,		ad. libit.		
Avena.	Seed.			
Oats.				
Balfamum Canadense.				
Canada Balfam.		gtt. xx. to xxx.		
Balfam. Copaibæ.				
Capivi Balfam.		gtt. xx. to xxx.		
Balfam. Gileadenfe.				
Balfam of Gilead.		gutt. x. to xl.		
Balfam. Peruvian.				
Balfam of Peru.		gutt. x. to xl.		
Balfam. Tolutan.			Tinct. Tolutan.	gutt. v. to xx
Balfam of Tolu.		gr. v. to ℈i.	Syrup. Balfam.	ʒi. to ij.
			℞ *Syrupus Tolutanus.*	
Bardana.	Root.		Decoct. Bardanæ,	ʒj. (exp
Burdock.		℈i. to ʒi.	(ʒij. to lb. i.)	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
rilla.			Soda purificata,	℈ ß. to ℈ i.
pure Foſſile			Sal Rupellenſis,	ʒ ß. to ʒ x.
Alkali.)			*vel Soda tartarizata.*	
			Sal Glauberi,	ʒ v. to ʒ x.
			vel Soda vitriolata.	
'adonna.	Leaves.		Infuſ. Belladon.	ʒ i.
dly Night-ſhade.		gr. i. to vi.	(gr. i. to ʒ i.)	
			Extract. Bellad.	gr. i. to iv.
zoinum.			Flor. Benzoin.	gr. iv. to vi.
jamin.		gr. iv. to xv.	*vel Acidum Benzoicum.*	
			Tinct. Benzoin.	gutt. x. to xl.
			Elix. Traumatt.	gutt. x. to xxx.
			vel Tinct. Benzo. comp.	
orta.	Root.			
ort, or Snake-		gr. x. to ʒ i.		
eed.				
ax.		gr. x. to ℈ ij.	Sal ſedativ. Hombergii,	
cal.				gr. iij. to ℈ i.
viva.			Aqua Calcis,	ʒ iv. to lb. i.
			Lin. Aq. Calcis.	
klime.			Lixivium cauſtic.	gtt. xv. to xl.
			vel Aq. Lixiv. cauſtic.	
			Lix. cauſt. acer.	
			mit.	
bora.		gr. iij. to ʒ ß.	Sp. Vinoſ. Camph.	
phire,			Emulſio Camphor.	ad. libit.
			Balſ. Opodeldoch.	
			vel Linim. ſaponaceum.	
			Linim. volat.	
			vel Oleum Ammoniatum.	
			Aq. Vitr. camp.	
la alba.	Bark.			
Cinnamon.		gr. iv. to vi.		
r.			Oculi Cancrorum,	℈ i. to ʒ i.
			Chelæ Cancror.	℈ i. to ʒ i.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Cantharis. Spanish Fly.		gr. ff. to ij.	Tinct. Canthar.	gutt. xx. to xxx.
			Emplast. Vesicator. *vel Emplast. Cantharid.*	
			Ung. epispal. fort. *vel. Ung. Pulv. Cantbar.* mit. *vel Ung. Infus. Cantbar.*	
Cardamine. Lady's Smock.		℈i. to ʒi.		
Cardamom minus. Lesser Cardamom.	Seed.	gr. iij. to ʒff.	Tinct. Cardom.	℈i. to ʒi
Carduus benedict. Holy Thistle.	Leaves.	gr. i. to ʒi.		
Carvi. Carraway.	Seeds.		Ol. Carvi,	gutt. iij
			Aq. Carvi,	ʒij. to iv
			spirit. *vel Spiritus Carvi.*	℥i
Caryophylla arom. Clove.	Fruit.	gr. iij. to ʒff.	Ol. Cary.	gutt. iij
Caryophylla rubra. Clove July flower.			Syr. Carophyl.	℥ij
Cascarilla.	Bark. gr. iv. to xij.		Infus. Cascaril. (℥i. to lb. i.)	ʒiij
Cassia fistularis. Cassia of the Cane.	Fruit.	ʒij. to ℥i.	Elect. Cassiæ,	ʒff. to ℥i
Cassia lignea. Cassia Bark.	Bark & flowers.	℈i. to ij.	Aq. Cassiæ,	℥ij. to iv
Castoreum. Castor.		gr. iv. to ℈i.	Tinct. Castor. Tinct. Cast. Comp.	ʒi.
Catechu. Japan Earth.		℈i. to ʒff.	Tinct. Japonic. *vel Tinct. è Catechu.*	ʒi. to ij
			Conf. Japonic. *vel Electuar. Japon.*	gr. v. to ℈i.
			Infus. Japonic. *vel Infus. Catechu.*	℥ij. to iv.

Simple.	*Parts us'ed.*	*Dose.*	*Compound and Chemical.*	*Dose.*
itaur. minus.	Tops.			
ffer Centaury.		ʒff.		
a alba et flava.			Linim. simplex.	
hite and Yellow			Ung. simplex.	
Wax.			Cerat. simplex.	
			Ung. Basilicon.	
			vel Ung. Resinosum.	
			Emplast. cereum.	
			vel Emplast. simplex.	
ussa.			Sacchar. Saturni,	gr. ½ to i.
hite Lead.			*vel Cerussa acetata.*	
			Ung. Saturni,	
			vel Ung. Cerus. acetat.	
			Ung. album,	
			vel Ung. Cerussæ.	
			Tinct. antiphthit.	gutt. xx. to xxx.
			vel Tinct. Cerus. acetat.	
mæmelum.	Single		Extra Cham.	gr. vi. to ʒff.
momile.	flower.	gr. v. to ʒi.	Decoct. cois,	ad libit.
			vel Decoct. Chamæmel.	
ta.	Leaves,		Extr. Cicut.	gr. v. to ʒi.
nlock.	flower,	gr. vi.		
	& seed.	to cxxviii.		
eres clavellati.			Lixiv. purificat.	gr. iij. to v.
or Pearl ash.			Tart. regenerat.	ʒi.
			vel Lixivia acetata.	
			Tart. vitriolat.	ʒi. to v.
			vel Lixivia vitriolata.	
			Tart. solubile,	ʒff. to ʒi.
			Lixivia tartarisata.	
tamomum.	Bark.		Species aromat.	gr. v. to xv.
namon.		gr. iij. to ʒff.	*vel Pulv. Aromaticus.*	
			Conf. Cardiac.	ʒi. to ij.
			vel Elect. Aromatic.	
			Ol. Cinnam.	gutt. iij.
			Tinct. aromat.	ʒi. to ij.
			vel. Tinct. Cinn. comp.	
			Tinct. Cinnam.	ʒi. to ij.
			Aq. Cinn.	ʒij. to iv.
			Spirit.	ʒi.
			vel Spiritus Cinnamomi.	

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dos*
Coccinella. Cochineal.		gr. xij. to ʒ ss.		
Cochlearia. Scurvy-Grass.	Leaves.	℈ ss. to ij.	Succ. ad scorbut. *vel Suc. Cochlear. comp.*	ʒij. to
Colchicum. Meadow Saffron.	Root.	gr. ij. to ℈ i.	Syrup. Colchici.	ʒi. to i ter indie
Colocynthis. Bitter Apple.	Fruit.	gr. v. to ℈ i.	Pil. Cocciæ, *vel Pil. Aloes, cum Coloc.*	℈ i. to i
Columba. Columbo.	Root.	gr. x. to ℈ i.	Tinct. Columbæ,	ʒ ss. to
Contrayerva. Counter-poison.	Root.	gr. vi. to ʒ ss.	Pulv. Con. com.	℈ i. to ʒ
Coriandrum. Coriander.	Seed.	℈ i. to ʒ i.		
Cornu Cervi. Hartshorn.		℈ ss. to ʒ i.	Sal C C. *vel Ammonia præparata.*	gr. iij. to xv
			Sal C. C. volat.	gr. vi. to ℈
			Ol. C. C. *vel Aq. Am. ex Ossibus.*	gutt.
			Sp. C C.	gutt. xv. to ʒ
			Decoct. alb.	ʒiv. sæpe
Cortex Peruvianus. Peruvian Bark.		℈ i. to ʒ i.	Extr. C. P.	gr. v. to ℈
			Decoct. C. P. *vel Decoct. Cinchonæ.*	lb. i. to ij. in
			Tinct. C. P. *vel Tinct. Cinchonæ.*	ʒi
Creta alba. Chalk.		℈ i. to ʒ i.	Pulv. cretaceus, Potio cretacea, Trochisci Cretæ,	℈ i. to ʒi ʒiv. sæpe ad libit
Crocus. Saffron.	Chives.	gr. v. to ℈ i.	Tinct. Croci,	gutt. x. to ʒ

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
aterium.	Fruit.			
ild Cucumber.		gr. i. to iij.		
brum vitriolatum.			Aq. ſtyptic.	
ue Vitriol.		gr. ½ to i.	*vel Aq. cup. vitr. comp.*	
gitalis.	Plant.			
ox-glove.		gr. i. to viij.		
llichos.	Down			
weech.	of the pod.	gr. ij. to viij.		
rrum.			Limatura.	gr. iv. to viij.
con.			Mars ſaccharat.	gr. iv. to viij.
			Vitriol. calcinat.	gr. ſſ. to ij.
			vel Ferrum v tr. exſiccat.	
			Colcothar. vitriol.	gr. ſſ. to ij.
			vel ——— uſtum.	
			Flores martiales,	gr. vi. to ℈i.
			vel Ferrum ammoniatum.	
			Tinct. Martis,	gutt. x. to xx.
			Sal Chalybis, *vel* Vitriol. Martis,	gr. ij. to vi.
			vel Ferrum Vitriolatum.	
lix Mas,	Root.			
ale Fern.		ʒi.		
eniculum dulce.	Seeds.			
weet Fennel.		℈i.		
ligo Ligni.			Tinct. Fulgin.	gutt. x. to ʒi.
oodfoot.				
maria.	Leaves.		Infuſ. Fumar.	ʒij. to iv.
mitory.		ʒſſ. to j.		
lbanum.				
alban.		gr. x. to xv.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Gallæ. Galls.		gr. ij. to vi.		
Gambogia. Gamooge.		gr. ij. to vi.		
Gentiana. Gentian.	Root.		Extr. Gentian.	gr. v. to ʒ.
			Infuſ. amar.	ʒi. to ʒiv.
			vel Infuſ. Gentiani comp.	
			Vin. amar.	ʒi. to iij.
			vel Vin. Gentiani comp.	
			Elix. ſtomach.	ʒʃ.
			vel Tinct. amar. vel G. c.	
Geofræa. Cabbage-tree.	Bark.	gr. ij. to x.	Infuſ. Geofreæ, (ʒi. to lb. ij.)	ʒʃ. to iv. indies.
Glycyrrhiza. Liquorice.	Root.	ʒʃ. to ʒi.	Extr. Glyc.	ad libit.
			Decoct. Glyc. (ʒi. to lb. ij.	idem.
			Trochiſci,	idem.
			vel Trochiſci Glycyrrh.	
Granata Malus. Pomegranate.	Flowers & rind of the fruit.	℈i. to ʒi.		
Gratiola. Hedge-Hyſſop.	Leaves.	gr. x. to ℈i.	Infuſ. Gratiol. (ʒi. to ʒiv.)	ʒʃ. to ij.
			Extr. Gratiol.	gr. iij. to ℈i.
Guaiacum. Guiac.	Wood, bark, & reſin.	ʒʃ.	Gum Guiac.	℈ʃ. to ʒʃ.
			Elix. Guiac.	gutt. xx. to ʒʃ.
			vel Tinct. Guaiaci.	
			Elix. Guiac. volat.	ʒʃ.
			vel Tinct. g. ammoniata.	
Hordeum. Barley.	Seed.		Decoct. Hordei.	ad libit.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Hydrargyrus. Mercury.		℥ss. to ij.	Merc. calcinat. *vel Hydrarg. calcinat.*	gr. i. to iij.
			Pil. Mercur. *vel Pil. Hydrargyri.*	gr. x. to xv.
			Pil. Æthiopicæ,	gr. x. to ℈i.
			Æthiops Mineral. *vel Hydr. sulphur. niger.*	℥ij.
			Pil. Plummeri, *vel Pil. Calomelan. comp.*	gr. x. to ℈i.
			Ung. cœruleum, *vel Ex. Hydrarg.*	
			Ung. Citrin. *vel Ung. Hydr. nitr.*	
			Ung. Calc. Hydrar. alb.	
			Emplaſt. cœrul. *vel Empl. Hydr.*	
			Mer. corroſ. ſubl. *vel Hydr. muriat. corroſ.*	gr. ſſ. to ij.
			Mer. dulcis, *vel Calomelas.*	gr. i. to v.
			Turpeth. mineral. *vel Hydr. vitriolat. flav.*	gr. ſſ. to i.
			Mer. cinereus, *vel Hydr. præcip. ciner.*	gr. ij. to iv.
			Mer. præc. rubr. *vel Hydr. nitrat. rubr.*	gr. i. to iij.
			Mer. præc. alb. *vel Calx. Hydrarg. alb.*	gr. ii. to iij.
Hyoſciamus. Henbane.	Herb, & ſeeds.		Extr. Hyſ.	gr i. to ℈i.
Jalapium. Jalap.	Ro	gr. x. to ℈ij.	Pulv. Jalap. comp.	℈i. to ℥ſſ.
			Pil è Jalap.	gr. x. to xv.
			Reſin. Jalap.	℈ſſ. to i.
			Tinct. Jalap.	℥ij. to vi.
Ipecacuhana. Ipecacuhan.	Root.	℈ſſ. to i.	Pulv. Dover. *vel Pulv. Ipecac. comp.*	gr. xv. to ℈i.
			Tinct. Ipecac. *vel vin. Ipecac.*	℥ſſ. to ij.

Simple.	*Parts used.*	*Dose,*	*Compound and Chemical.*	*Dose.*
Juniperus. Juniper.	Berry & top.	ʒij. Bacc.	Ol. Juniperi, Aq. Junip. comp. *vel Sp. Juniper. comp.*	gutt. iij. ʒi.
Kino. Gum Kino.		gr. viij. to xij.	Tinct. Kino,	ʒss. to i.
Lapis calaminaris. Calamy.			Cerat. Lap. cal.	
Lavendula. Lavender.	flower & tops.	℈i. to iij.	Ol. Lavand. Sp. Lavand Sp. Lav. Comp.	gutt. v. gutt. xxx. to ℈i. idem.
Lichen Islandicus. Iceland Liverwort.		℈i. to iij.	Mucilag. Lichen.	ad libit.
Lignum Campachense. Logwood.		gr. x. to ℈i.	Extr. L. C. Decoct. L. C. (ʒiij. to lb.ij.)	gr. v. to xv. ʒiv. sæpe.
Lilium album. White Lilly.	Root.	℈i. to ʒi.	Mucilag. Rad.	ad libit.
Limon. Lemon.	Juice, outer rind, &c		Succ. Limon. Syrup. Limon. Aq. Limon.	ʒi. to ij. ʒi. ʒij. to iv.
Linum. Lintseed.			Infus. Lin. (ʒss. to lb.ss.) Ol. Lini.	ad libit. ʒi.
Lithargyrus. Litharge.			Acet. Lithargyr. Aq. Veg. mineral.	gtt. x. to ʒi.
Lobelia. Blue Cardinal Flower.	Root.		Decoct. Rad. sicc. (ʒiv. to lb. v.	lb. ii. in dies.
Manna. Manna.		ʒij.	Serum Mannæ,	ad libit.
Magnesia alba. Magnesia.		℈i. to ʒij.		
Mastiche. Mastic.		gr. ij to xij.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Melampodium. Black Hellebore.	Root.	gr. vi. to ʒ ss.	Extr. Melam. Tinct. Melamp.	gr. v. to ϑ ss. gr. v. to ϑ ss.
Mentha Pipirit. Peppermint.	Leaves.		Ol. Menthæ, Aq. Menth. spirit. *vel Sp. Menthæ.*	gutt. iij. ʒij. to iv. ʒi.
Mentha Sativa. Spearmint.			Infus. callid. *vel* Thea. (ʒi. to lb. i.)	ad libit.
Menyanthes. Marsh Trefoil.		ϑ i. to ij.		
Mezereon.		gr. ss. to iij.	Decoct. Mez. (ʒi. to lb. iiij.)	lb. ij. in dies
Millepedæ. Slaters, or Woodlice,		gr. iij. to v.	Vin. Millep.	ʒ i. to ij.
Moschus. Musk.		gr. iij. to xij.	Tinct. Moschi,	gtt. xxx. to ʒ i.
Myrrha. Myrrh.		gr. iij. to xij.	Tinct. Myrrhæ,	gtt. xv. to ʒi.
Nicotiana. Tobacco.			Infus. Nicot. Vin. Nicot.	gtt. lx. to cxx. idem.
Nitrum. Nitre.		gr. vi. to ϑ i.	Acid. nitros. tenue Trochisci Nitri, Sp. Nitri dulcis, *vel Sp Ætheris nitrosi.* Caustic. Lunar. *vel Argentum nitratum.* Sal Polychrest. *vel Lixivia Vitriol. sulph.*	gtt. aliq. ad libit. ʒ ss. to i. ʒij. to ʒ ss.
Nux Moschata, vel Myristica. Nutmeg.		gtt. xv. to ʒ i.	Aq. Nuc. spirit. *vel Sp. Myristicæ.*	ʒ i. to ʒi.
Olibanum. Frankincense.		gr. v. to ϑ i.		

Simple.	*Parts uſed.*	*Doſe.*	*Compound and Chemical.*	*Doſe.*
Olea expreſſa. Expreſſed oils.		ʒi.		
Opium.		gr. i. to cxx.	Pil. pacific. *vel Pil. Opii.*	gr. x. to ℈i.
			L. Laudanum. *vel Tinct. Opii.*	gtt. xxx. to ʒi.
			Elect. Thebaic. *vel Electuar. Opiatum.*	ʒij. to ʒiſs.
			Elix. Paregoric. *vel Tinct. Opii ammon.*	ʒi.
			Trochiſci Bechichi, *vel Troch. Glycyr. cum Op.*	ʒ *vel* 4 in dies.
			Balſam. Anodyn. *vel Linim. opiatum.*	
Papaver. Poppy.	Head.		Syrup. Diacodion. *vel Syrup. Papav. albi.*	ʒi. to ʒi.
Petrolium. Rock Oil.			Aq. Petreoli. (lb.ij. to *cong.* ij.)	ʒiv. to lb.ſſ.
Pimenta. Jamaica Pepper.	Berry.	gr. ij. to iv.	Aq. Piment. ——— ſpirit. *vel Sp. Pimentæ.*	ʒi. to iv. ʒi. to ʒi.
Pulſatilla Nigricans. Meadow Anemone.	Herb & flower.		Extr. Pulſat. Aq. Pulſat.	gr. v. to ℈i. ʒiſs.
Pyrethrum. Pellitory.	Root.	gr. iv. to ℈i.		
Quaſſia. Quaſſy.	Wood, bark, & root.	gr. x. to ℈i.		
Quercus. Oak.	Bark.	℈ij. to ʒi.		
Quereus Marina. Sea Wreck.			Æthiops Vegetabilis,	ʒi. to ʒij.
Raphan. Ruſtic. Horſe-Radiſh.	Root.	ʒi. to ij.	Aq. Raphan.	ʒij. to iv.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Radix Indica Lopez. Indian, or Lopez's Root.		ʒss.		
Rhamnus Cathart. Buck Thorn.	Root.	ʒi. to iij.	Syrup. Rhamn.	ʒi. to iij.
Rheum. Rhubarb.	Root.	℈i. to ʒi.	Pil. stomach.	ʒss.
			vel Pil. Rhei comp.	
			Infus. Rhei,	ʒij. to iv.
			Tinct. Rhei,	ʒij. to ʒss.
			Vin. Rhei dulc.	ʒi.
			——— amar.	ʒi.
			Elix. Sacer.	ʒi.
			vel Tinct. Rh. cum Aloe.	
Rhododendron.	Herb.	gr. ij. to iv.	Decoct. Rhodod. (ʒij. to ʒx.)	ʒij. to v.
Ricini Ol. Castor Oil.	Seed.	ʒij. to ʒss.		
Rosæ pallidæ. Pale Roses.	Petal.		Aq. Rosar.	ʒij. to iv.
			Syrup. Rosar.	ʒi.
Rosæ rubræ. Red Roses.	Petal.		Conserv. Rosar.	ʒss.
			Tinct. Rosar.	ʒi. sæpe.
			vel Infus. Rosar.	
			Syrup. Rosar.	ʒi.
Rosmarinus. Rosemary.	Top & flower.		Ol. Rosmar.	gutt. iij.
			Aq. Sp. Rosmar.	ʒi. to ʒi.
			vel Sp. Rosmarin.	
			Aq. Regin. Hung.	idem.
			Acet. Aromat.	ʒi. to ij.
Rubia. Madder.	Root.	ʒss. to i.		
Ruta. Rue.	Herb.	℈ss. to ʒi.	Ol. Rutæ,	gutt. iij.
			Infus. Rutæ, (ʒi. to lb.i.)	ʒij.
Sabina. Savine.	Leaf.	ʒss. to i.	Extr. Sab.	gr. v. to ℈ss.
			Decoct. Sabin. (ʒi. to lb. iij.)	ʒij. to iv.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Sagapenum. Sagapen.		gr. v. to ℈i.		
Sal Ammoniacum. Ammoniac Salt.		ʒss. to i.	Sal Ammon. vol. *vel Ammon. præparata.*	gr. v. to ℈i.
			Sp. Sal Am. *vel Aq Ammoniæ.*	gutt. xv. to ʒi.
			Sp. Sal Am. cum Calce. *vel Aq. Am. causlic.*	
			Sp. Sal Am. vin. *vel Sp. Ammoniæ.*	gtt. x. to ʒi.
			Sp. Salin. arom. *vel Sp. Am. aromat.*	gutt. x. to xl.
			Sp. volat. fœtid. *vel Sp. Am. fœtid.*	gtt. x. to xxx.
			Sp. Mindereri, *vel Aq. Am. acetat.*	ʒij. to ℥i.
Sal marin. Hisp. Sea Salt.		ʒi.	Sp. Sal marin. *vel Soda muriata.*	gutt. v.
Salvia. Sage.	Leaf.	℈i. to ʒi.	Infus. Salviæ,	ad libit. (℥ij to lb.i.)
Sambucus. Elder.	Inner bark, flower, & berry.		Decoct. Samb. (flor. mp. i. to ℥vij.)	ʒss. to i.
			Rob. Samb.	ʒi. to ℥i.
Sal Cathart. amar. vel Magnesia vitriolata. Bitter Cathartic Salt.		ʒij. to ʒss.		
Sapo alb. Hispan. Castile Soap.		℈i. to ʒij.	Pil. Sapo. Linim. saponac.	gr. v. to ℈i.
Sarsaparilla.	Root.	ʒi. to ʒss.	Decoct. Sarsæ, (℥i. to lb.i)	lb.ij. in dies.
Sassafras.	Wood, root, & bark.		Decoct. Lignor. ʒij.	idem.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Scammonium. Scammony.		gr. iij. to xij.	Pulv. Scam. c.	℈i. to ij.
Scilla. Squill.	Root.	gr. ij. to vi.	Pulv. Siccat.	gr. i. to iij.
			Pil. scillit.	gr. xv.
			Acet. scillit.	ʒi. to ʒss.
			Oxymel scillit.	ʒss. to ʒiij.
			Syrup. scillit.	ʒi. to ʒij.
			Vin. scillit. (rad. ʒss. ad vin. lb.ij.) ʒss. pro dose.	
Scordium. Water Germander.		gr. v. to ℈i.		
Seneka. Senega.	Root.	℈i. to iij.	Decoct. Senekæ, (ʒi. to lb.i.)	ʒij. to iv.
Senna.	Leaf.	ʒi. to ʒss.	Elect. Lenitiv. *vel Electuar. Sennæ.*	ʒij. to ʒss.
			Elix. salut. *vel Tinct. Sennæ comp.*	ʒij.
Serpentaria. Snake-root.	Root.	ʒi. to ℈ss.	Decoct. Serpent. (rad. ʒij. to ʒvi.)	ʒi. sæpe.
			Tinct. Serpent.	ʒss. to ij.
Simarouba.	Bark.	gr. x. to ℈i.	Decoct. Simar. (ʒij. to lb.i)	ʒij. sæpe.
Spermaceti, vel Sevum Ceti.		℈i. to ʒi.		
Sinapi album. White Mustard.	Seeds.	ʒi.		
Spigelia. Indian Pink.	Root.	gr. x. to ℈i.		
Spongia. Sponge.			Spongia usta,	℈i. to ʒi.
Stannum. Tin.	Filings and powder.	ʒss. to i.		
Styax. Storax.		gr. v. to ℈ss.		

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Succinum. Amber.		gr. viij. to ʒʃʃ.	Ol. Succini, Sal Succini,	gutt. x. to xxv. gr. iv. to ℈i.
Sulphuris Flores. Flowers of Sulphur.		ʒij. to ℥ʃʃ.	Ung. antipsoric. *vel Ung. Sulphuris.* Balsam. sulph. gtt. xv. to xxx.	
Tamarindus. Tamarind.	Fruit.	℥ij.	Infus. cum Sennâ,	℥ij to iv.
Tartari Chrystalli. Chrystals of Tartar.		ʒv. to vi.	Sal Tartar. Lixiv. Tartar.	gr. iij. to xv. gutt. xv. to ʒi.
Terebinthina Veneta. Venice Turpentine.		℈ʃʃ. to ʒʃʃ.	Ol. Terebinth. Sp. Terebinth.	gutt. v. gutt. x. to xx.
Tormentilla. Tormentill)	Root.	℈ʃʃ. to ʒi.	Infus. Rad. (℥i. to lb i.)	℥ij. sæpe.
Tussilago Coltsfoot.	Herb & flowers.		Infus. Tussilag. (Herb. mp. i. to lb.i.) Syrup. Tussilag.	ad libit. ℥i.
Tutia. Tutty.				
Valeriana sylvest. Wild Valerian.	Root.	℈ʃʃ. to ʒʃʃ.	Infus. Valerian. (℥i. to lb.i.) Tinct. Val. volat. *vel Tinct. Valer. Am.*	ad libit. gtt. xx. to xl.
Veratrum White Hellebore.	Root.	gr. v. to ʒʃʃ.	Tinct. Veratri, Decoct. Verat. (℥i. ad lb.i.)	ʒʃʃ. ℥i. sæpe.
Viola. Violet.	Fresh flower.		Infus. Violar. ℥i. to lb.i.) Syrup. Violar.	℥ij. to viij. ℥i.
Vipera. Viper.		℈ʃʃ. to ʒi.	Vin. Viperin.	ʒij. to ℥i.
Ulmus. Elm.	Inner bark.		Decoct. Ulmi, (℥ij. to lb.ij.)	lb. ij. in dies.
Uva Ursi. Bear's Wortleberry.	Leaf.	℈i. to ʒiij.	Infus. Uvæ Ursi, (ʒij. to lb.i.)	℥i. to viij.

Simple.	*Parts used.*	*Dose.*	*Compound and Chemical.*	*Dose.*
Zincum.			Ung. Zinci,	
Zinc.			Flor. Zinci,	gr. ij. to ℈i.ff.
			vel Zincum ustum.	
			Aq. Vitriolica.	
			vel. Aq. Zinci vitriolat.	
			Vitriolum album.	℈i.ff. to ij.
			vel Zinc. vitriolat.	
Zinziber.	Root.		Infuf. Zinziber.	℥ij. to iv.
Ginger.		gr. v. to x.	℥ij. to lb.i.	
			Syrup. Zinziber.	℥i

TABLE

Shewing the Quantity *of the* Principal *or* Active INGREDIENT *in certain* COMPOUND MEDICINES.

OPIUM.

	now	contains
L. Laud.	(*Tinct. Opii.*)	in each ounce ℈ij. of Opium.
Paregor. Elix.	(*Tinct. Opii cam.*)	ditto gr. viii. of Opium.
Dover's Powd.	(*Pulv. Ipec. comp.*)	Dram gr. vi. of Opium.
Thebaic Elect.	(*Elect. Opiat.*)	ditto gr. i. of Opium.
Japon. Elect.	(*Elect. Catech.*)	Ounce gr. ij. ff. of Opium.
Pacific Pills.	(*Pil. Opiat.*)	Dram gr. vi. of Opium.
Opium Troch.	(*Troch. Glyc. cum Op.*)	ditto gr. i. of Opium.
Anod. Balsam.	(*Linim. Opiat.*)	Ounce ℈j. of Opium.

MERCURY.

	now	contains
Pil. Merc.	(*Pil. Hydrar.*)	in each Dram gr. iv. of ☿.
Pil. Plum.	(*Pil. Calom. comp.*)	ditto gr. xxii. of ☿.
Ung. Merc.	(*Ung. Hydrar.*)	ditto gr. xij. of ☿.
Ung. nitrat.	(*Ung. Citrin.*)	ditto gr. iv. of ☿, and gr. vii. of acid.
Ung. nitrat. mit.	(*Ung. citr. mit.*)	ditto gr. ii. of ☿, and gr. iv. of acid.
Emplast. Merc.	(*Emp. Hydrar.*)	ditto gr. xvi. of ☿.

ANTIMONY.

	now	contains
Tartar emetic Wine.	(*Vin. Antimon. Tart.*)	in each Ounce gr. ij. of Tartar.

SCAMMONY.

		contains
Comp. Powder of Scammony.	(*Pulv. Scam. comp.*)	in each gr. vij. gr. iv. of Scam.

ALOES.

	now	contains
Colocynth Pills.	(*Pil. Aloes cum Colocynth.*)	in each Dram gr. xvi. of Aloes.

JALAP.

	now	contains
Comp. Powder of Jalap.	(*Pulv. Jalap comp.*)	in each Dram ℈i. of Jalap.

PART II.

CLASSIFICATION

OF THE

PRINCIPAL* ARTICLES OF THE MATERIA MEDICA,

(ENUMERATED IN PART FIRST,)

ACCORDING TO THEIR MEDICAL QUALITIES.

CLASS I.

EMETICS,	EMETICA.
1. MILD, *as*,	1. MITIA, ut,
Bitters in an increased dose	*Amara fortia*
Chamomile, Carduus, &c.	
Ipecacuhan	*Ipecacuhan*
Wine of ditto	*Vin. ejusdem*
Antimonial Wine	*Vinum antimoniale*
White Vitriol	*Vitriolum album*
Oxymel of Squills	*Oxymel Scillarum*
Syrup of ditto	*Syrup. Scillarum.*
2. DRASTIC, *as*,	2. DRASTICA, ut,
Tartar emetic	*Tartarus emeticus*
Wine of ditto	*Vin. è Tart. emetic.*
Turpeth Mineral	*Turpethum minerale*
Blue Vitriol	*Vitriolum cœruleum, vel cuprum vitriol.*

* Some of the lesser classes are omitted, as *Errhines, Sialagogues,* being now disused in practice.

CLASS II.

PECTORALS,	PECTORALIA.
1. ATTENUANTS, *as,*	1. ATTENUANTIA, ut,
Garlic (freſh and dried)	*Allium*
Syrup of ditto	*Syrup. Allii*
Squills (freſh and dried)	*Scilla*
Vinegar of ditto	*Acetum ſcilliticum*
Oxymel of ditto	*Oxymel ſcilliticum*
Syrup of ditto	*Syrup. ſcilliticus*
Pills of ditto	*Pill. ſcillit.*
Ground Ivy Infuſion	*Hederæ Terreſtris Infuſ.*
Decoction of Liquorice	*Infuſ. Glycyrrhizæ*
Extract of Liquorice	*Extr. ejuſdem*
Benjamin	*Benzoinum*
Flowers of ditto	*Flores Benzoïni*
Tincture of ditto	*Tinct. ejuſdem*
Gum Ammoniac	*Ammoniacum Gum.*
Flowers of Sulphur	*Flores Sulphuris*
Balſam of ditto	*Balſam. ejuſdem.*
2. INCRASSANTS, *as,*	2. INCRASSANTIA, ut,
Coltsfoot	*Tuſſilago*
Tea and Syrup of ditto	*Infuſ. et Syrup. ejuſdem.*
Marſhmallow	*Althæa*
Decoction of ditto	*Decoct. ejuſdem*
Syrup of ditto	*Syrup. ejuſdem*
Gum Arabic	*G. Arabicum*
Mucilage of ditto	*Mucilago ejuſdem*
Emulſion of ditto	*Emulſio ejuſdem*
Arabic Troches	*Trochiſci Arabici*
Lintſeed Tea	*Infuſ. Sem. Lini*
Spermaceti	*Spermaceti, vel Sevum Ceti*
Expreſt Oils, as,	*Olea expreſſa, ut,*
Oil of Sweet Almonds	*Ol. Amygdal. dulcium*
Opium	*Opium.*

CLASS III.

CATHARTICS.	CATHARTICA.
1. LAXATIVES.	1. LAXANTIA.
Acid Fruits, *as,*	*Fructus acidi,* ut,
Tamarinds	*Tamarandi*
Caſſia of the Cane	*Caſſia Fiſtularis*
Electuary of ditto	*Elect. Diacaſſia*
Manna	*Manna*
Manna Whey	*Serum Mannæ*
Syrup of Pale Roſes	*Syrup. Roſar. Damaſcenſ.*
Ditto of Violets	*Syrup Violarum*
Soap	*Sapo*
Soap Pills	*Pil. Saponac.*
Cream of Tartar	*Crem. Tartari*
Magneſia	*Magneſia alba*
Caſtor Oil	*Ol. Ricini*
Flowers of Sulphur	*Flores Sulphuris.*
2. PURGATIVES, *as,*	2. PURGANTIA, ut,
Aloes	*Aloe*
Aloetic Pills	*Pil. aloetic, vel ex Aloe*
Rufus' Pills	*Pil. Rufi, vel Aloes cum Myrrhâ*
Aloetic Wine	*Vin. aloetic*
Rhubarb	*Rhæum*
Stomachic Pills	*Pil. ſtomach.*
Tincture of Rhubarb	*Tinct. Rhæi*
Infuſion of ditto	*Infuſio ejuſdem*
Wine of ditto	*Vin. ejuſdem*
Bitter Tincture of ditto	*Tinct. Rhæi amar. vel T. Rhubarb. C.*
Sweet Tincture of ditto	*Tinct. Rhæi dulcis*
Sacred Elixir	*Elixir ſacrum, vel ex Aloe et Rhæo*
Senna	*Senna*
Infuſion of Tamarinds with Senna	*Infuſ. Tamarind. cum Sennâ*
Lenitive Electuary	*Electuar lenitiv. vel è Sennâ*

Elixir of Health	*Elix. salut. vel Tinct. Sennæ C.*
Jalap	*Jalapium*
Extract of ditto	*Extr. ejusdem*
Compound Powder of ditto	*Pulv. ejusdem comp.*
Jalap Pills	*Pil. è Jalap.*
Tincture of Jalap	*Tinct. Jalap.*
Syrup of Buckthorn	*Syrup. de Rhamno*
Bitter Cathartic Salt	*Sal Cathart. amar.*
Glauber's Salt	*Sal Glauberi, vel Soda Vitriol.*
Solubile Tartar	*Tartar solubile, vel Kali Tartarisat.*
Vitriolated Tartar	*Tartar vitriolatum, vel Kali Vitriolat.*
Polychrest Salt	*Sal Polychrest. idem*
Rochelle Salt	*Sal Rochelle, vel Soda Tartaris.*
3. DRASTICS, *as,*	3. DRASTICA, ut,
Colycinth	*Colycinthis*
Pills of ditto	*Pil. è Colocynth.*
Scammony	*Scammonium*
Compound Powder of ditto	*Pulv. Scamm. comp.*
Elaterium	*Elaterium*
Gamboge	*Gambogia*
Foxglove	*Digitalis*
Decoction of ditto	*Decoct. ejusdem*
Black Hellebore	*Melampodium*
Tincture of ditto	*Tinct. ejusdem*
White Hellebore	*Veratrum*
Tincture of ditto	*Tinct. ejusdem*
Hedge Hyssop	*Gratiola.*

CLASS IV.

ABSORBENTS.	ABSORBENTIA.
Crabs' Eyes	*Oculi Cancrorum*
Crabs' Claws	*Chelæ eorundem*
Prepared Chalk	*Creta præparata*
Coral	*Corallium*
Pearls	*Margaritæ*

Magnesia	*Magnesia*
Calcined Hartshorn	*Cornu Cervi calcinat.*
Quick-lime	*Calx viva*
All Alkalis in a diluted state	*Alkalina mitia.*

CLASS V.

DIURETICS.	DIURETICA.
Juniper	*Juniperus*
Oil of ditto	*Ol. ejusdem*
Spirit of ditto	*Aq. composita ejusdem*
Garlic and its Preparations	*Allium et præparat.*
Burdock	*Bardana*
Decoction of ditto	*Decoct. ejusdem*
Squill and its Preparations	*Scilla et præparat.*
Wakerobin	*Arum*
Asarum	*Asarum*
Horse radish	*Raphan. rustic.*
Water of ditto	*Aq. ejusdem*
Seneka	*Seneka*
Decoction of ditto	*Decoct. ejusdem*
Nitre	*Nitrum vel Kali Nitrat.*
Salt of Tartar	*Sal Tartar. vel Aq. Kali*
Cream of ditto	*Cremor Tartar.*
Ammoniac Salt	*Sal Ammoniac.*
Spanish Flies	*Cantharides*
Tincture of ditto	*Tinct. ejusdem*
Syrup of Meadow Saffron	*Colchic. Syrup.*
Acids	*Acida*
Opium	*Opium.*

CLASS VI.

DIAPHORETICS.	DIAPHORETICA.
Saffron	*Crocus*
Tincture of ditto	*Tinct. ejusdem*
Counter-poison	*Contrayerva*

Compound Powd. of ditto	*Pulv. contrayer. comp.*
Guiac	*Guiacum*
Decoction of the Woods	*Decoct. Lignor*
Sarſaparilla	*Sarſaparilla*
Decoction of ditto	*Decoct. ejuſdem*
Antimony	*Antimonium.*

CLASS VII.

SUDORIFICS.	SUDORIFICA.
Opium	*Opium*
Camphire	*Camphora*
Vinegar	*Acetum*
Volatile Alkali	*Alkali volatile*
Muſk	*Moſchus*
Snake root	*Serpentaria*
Tincture of ditto	*Tinct. ejuſdem*
Neutral Salts, *as*,	*Sales medii*, ut,
Mindererus Spirit, &c.	*Sp. Mindereri*, *Aq. Ammon. Acetat. &c.*

CLASS IX.

CORROBORANTS.	ROBORANTIA.
I. ASTRINGENTS.	I. ASTRINGENTIA, ut,
Red Roſes	*Roſæ rubræ*
Balauſtine Flowers	*Flores Balauſt.*
Tormentill	*Tormentilla*
Oak Bark	*Cort. Querci*
Logwood	*Lignum Campechenſe*
Galls	*Gallæ*
Japan Earth	*Catechu*
Dragon's Blood	*Sanguis Draconis*
Gum Kino	*Gum Kino*
Alum	*Alumen*

Armenian and other Bolar Earths	*Bolus Armena, &c.*
Preparations of Iron	*Ferri præparat.*
Ditto of Copper	*Cupri eædem*
Ditto of Lead	*Saturni eædem*
Ditto of Zinc	*Zinci eædem.*

2. TONICS, *as,*	2. TONICA, ut,
Gentian	*Gentiana*
Leſſer Centaury	*Centaurium minus*
Quaſſy	*Quaſſia*
Simarouba	*Simarouba*
Decoction of ditto	*Decoct. ejuſdem*
Chamomile	*Chamæmelum*
Wormwood	*Abſinthium*
Tincture of ditto	*Tinct. ejuſdem*
Leopard's Bane	*Arnica*
Decoction of ditto	*Decoct. ejuſdem*
Peruvian Bark	*Cortex Peravianus*
Anguſtura Bark	——— *Anguſtur.*

CLASS IX.

STIMULANTS.	STIMULANTIA.
1. AROMATICS, *as,*	1. AROMATICA, ut,
Peppermint	*Mentha Piperitidis*
Spearmint	——— *Sativa*
Lavender	*Lavendula*
Leſſer Cardamom	*Cardamom. minus*
Roſemary	*Roſmarinus*
Cinnamon	*Cinnamomum*
Caſſia	*Caſſia*
Canella alba	*Canella alba*
Caſcarilla	*Caſcarilla*
Wild Valerian	*Valeriana ſylveſtris*
Cochineal	*Coccinella*
Orange Bark	*Cortex aurant.*
Sweet-ſcented Flag	*Acorus,*

2. PUNGENTS, *as*,	2. PUNGENTIA, ut,
Muſtard	*Sinapi*
Nutmeg	*Myriſtica*
Clove	*Caryophylla aromatica*
Mace	*Macis*
Ginger	*Zinziber*
Alcohol	*Alcohol.*

3. BALSAMICS, *as*,	3. BALSAMICA, ut,
Turpentines	*Terebinthinæ*
Canada Balſam	*Balſam Canadenſe*
Capivi Balſam	—— *Copaibæ*
Peruvian ditto	—— *Peruvian.*
Balſam of Tolu	—— *Toletan.*
Myrrh	*Myrrha*
Storax	*Storax*
Tar	*Petreolum.*

CLASS X.

DEOBSTRUENTS.	DEOBSTRUENTIA.
Borax	*Borax*
Madder	*Rubia*
Soap	*Sapo*
Mercury	*Mercurius, vel Hydrar.*
Mezereon	*Mezereon*
Lobelia	*Lobelia*
Antimony	*Antimonium.*

CLASS XI.

SEDATIVES.	SEDANTIA.
Acids	*Acida*
Nitre	*Nitrum, vel Kali Nitrat.*
Opium	*Opium*
Hemlock	*Cicuta*

Deadly Night-ſhade	*Belladonna*
Henbane	*Hyoſciamus*
Camphire	*Camphora.*

CLASS XII.

ANTISPASMODICS.	ANTISPASMODICA.
Amber	*Succinum*
Aſa-fœtida	*Aſa-fœtida*
Galbanum	*Galbanum*
Sagapen	*Sagapenum*
Woodſoot	*Fuligo*
Ether	*Æther*
Caſtor	*Caſtoreum*
Muſk	*Moſchus*
Volatile alkaline Salts	*Sal. alkalina volatil.*

CLASS XIII.

CARMINATIVES.	CARMINATIVA.
Coriander	*Coriandrum*
Dill	*Anethum*
Sweet Fennel	*Fœniculum dulce*
Caraway	*Carvi*
Aniſe	*Aniſum*
Leſſer Cardamom	*Cardamomum minus.*

CLASS XIV.

EMOLLIENTS.	EMOLLIENTIA.
Althea	*Althea*
Quince Seed	*Sem. Cydonior.*
Linſeed	*Lini ſem.*
White Lily	*Lilium album*

Expreſt Oils	*Olea expreſſa*
Gum Arabic	*Gum. Arabicum*
Gum Tragacanth	—— *Tragacanth.*
Starch	*Amylum*
Spermaceti	*Spermaceti*
Axunge	*Axungia, vel adep. ſuilla.*

CLASS XV.

ANTHILMINTICS.	ANTHILMINTICA.
Fœtids, *as* Rue, Tanſy, &c.	*Fœtida*, ut *Ruta, &c.*
Bitter and acrid Purgatives, *as* Rhubarb, &c.	*Amara et acria Purgantia*
Tin	*Stannum*
Coweech	*Dolichos*
Cabbage-tree	*Geofræa*
Male Fern	*Filix mas*
Mercury, *as* Æthiops Mineral, &c.	*Hydrargyrus*, ut *Æthiops Mineral, Calomel, &c.*
Lime Water	*Aqua Calcis.*

CLASS XVI.

LITHONTHRIPTICS.	LITHONTRIPTICA.
Alkali, both mild and cauſtic	*Alkali cauſtic. et mite, vel Aqua Kali pur. et Aq. Kali*
Soap	*Sapo*
Lime-water	*Aqua Calcis*
Alkaline aërated Water	*Aqua alkalin. aërat.*
Wild Carrot	*Daucus ſylveſtris*
Bear's Whortleberry	*Uva Urſi*
Diuretics	*Diuretica.*

CLASS XVII.

REPELLENTS.	REPELLENTIA.
1. DISCUTIENTS, *as*,	1. DISCUTIENTIA, ut,
Calamy	*Lapis Calaminaris*
Zinc	*Zincum*
Tutty	*Tutia*
Lead	*Saturnum*
Mindererus Spirit	*Sp. Mindereri, vel Aq. Ammon Acetat.*
Vinegar	*Acetum.*
2. COSMETICS, *as*,	COSMETICA, ut,
Balsam of Mecca	*Balsam Meccæ*
Issues	*Fonticuli.*
3. STYPTICS, *as*,	STYPTICA, ut,
Agaric	*Agaric*
Sponge	*Spongia*
Styptic Powder	*Pulv. Styptic.*
Actual Cautery	*Cauterium.*

CLASS XVIII.

CAUSTICS.	CAUSTICA.
1. INFLAMMANTS, *as*,	1. INFLAMMANTIA, ut,
Pellitory	*Pyrethrum*
Mustard	*Sinapi*
Wake-robin	*Arum*
Garlic	*Allium*
Onion	*Cepa*
Leek	*Porum.*

2. VESICANTS, *as*,	2. VESICANTIA, ut,
Spaniſh Flies	*Cantharides*
Racunculus	*Racunculus*

3. CORROSIVES, *as*,	3. CORROSIVA, ut,
Arſenic	*Arſenicum*
Quicklime	*Calx viva*
Concentrated Acids	*Acida acerr.*
Cauſtic	*Cauſticum acerrimum*
Common ditto	——— *commune*
Blue Vitriol	*Vitriolum cœruleum vel Cupri*
Verdigreaſe	*Ærugo Æris, vel Cuprum Acetat.*
Butter of Antimony	*Butyrum Antimonii, vel Antimon. Muriat.*

PART III.

EXTEMPORANEOUS PRESCRIPTION;

OR,

THE PRINCIPAL FORMS & REMEDIES

EMPLOYED IN

THE DISEASES OF INFANCY.

I. Treatment of Children.

The treatment of children at birth depends on making the transition from the fœtal ſtate as ſlight as poſſible. This tranſition conſiſts in

1. *Change of Atmoſphere.*

To remedy this, the child ſhould be wrapped up as warm as poſſible, and no other ſtep taken for ſome time. It ſhould then be waſhed with ſoap and water, lukewarm; but, in doing it, the ſkin ſhould be no way fretted, and the expoſure made for as ſhort a time as poſſible.

2. *Change of Circulation.*

To render this as light as poſſible to the conſtitution of the child, no ſeparation betwixt the mother and child ſhould be made till the pulſation in the umbilical cord entirely ceaſes; and then the ligature may be paſſed, as directed Vol. III. p. 131, and the cord cut.

3. *Change of Nourishment.*

Milk alone should form the nourishment of the child, and nothing else should supply its place, nor be offered to it, till a proper supply fill the breast of the mother, or twenty-four hours after delivery, at which time the child's organs are also prepared to receive it.

The milk should also possess the proper proportion of its principles: its age should suit that of the child, and no other nourishment should be interposed till the end of the first month, when a little boiled bread may be added to it once a day, but no animal food should be permitted till the child is able to walk.

When the mother's milk is deficient, its flow may be assisted by much use of diluent or fluid diet; and with this view, also, a mixture of milk and beer has been particularly recommended. It is prepared by letting two parts of milk rise over a gentle fire, and adding to it one part of well-fermented beer previously boiled. It is to be taken cold.

When weaning takes place, the use of additional nourishment must be begun for some time previous to it; and the child is weaned by anointing the nipple with some disagreeable substance, as soot or aloes.

When the child is brought up by the hand, the same principles in the choice of the milk are to be studied as when reared by the mother.

The milk is given by means of a pot, or other instrument, in a lukewarm state. It should be prepared by mixing it with a little light animal jelly to render it less acescent, and have also a proportion of sugar dissolved in it to increase its nourishing quality. This milk should be always taken from the same animal.

Where milk disagrees with children brought up in this way, weak beef or veal tea may be substituted occasionally in its place, or a soup composed of beer and the yolk of an egg. The beer must be vinous; the yolk of the egg must be mixed with a pint of the beer while boiling, and the remainder added when cold.

Whey is the best drink for children brought up by the hand; and it should be always made of milk from the same cow.

An earlier use of additional nourishment and of animal food should in general also be permitted here.

II. Diseases of Children.

In prescribing for children, the chief difficulty lies in fixing the appropriate dose; and hence medicines more frequently fail with

them, or are over-dofed, than with the adult. As a direction, therefore, it is proper to examine in a general manner the proportions fit for this early period of life.

Thus 7 years require half the dofe of an adult.
3 years the fourth.
1 year the fixth.
1 month the tenth.

With thefe proportions in view, where no peculiarity of conftitution exifts, the dofes ftated will generally fucceed.

The difeafes of children to be judged of from the ftate of the fontanelle and fkin.

Incomplete Animation.

Fainting removed by the ufe of volatiles; as

℞ Lact. Afæfœtid. gutt. iv.
Aq. Font. ʒij. m. *A dofe.*

℞ Tinct. Valerian. Sylveft. gutt. iv.
Aq. Menth. ʒij. m. ft. hauft. *To be given every two hours.*

Still-birth to be recovered,

1. By warmth, as covering the child with warm cloths, and ufing the warm bath.

2. By exciting the action of fome principal organ, as blowing into the windpipe, inflating the lungs, and expelling it again by preffure on the breaft; ftimulating the nofe and throat by means of a feather; injecting warm glyfters, or of tobacco-fmoke into the rectum; immerfing the placenta in warm water, and forcing the blood into the circulation of the child; employing friction of the furface with ftimulants, or ftriking the foles and nates.

The partial fpecies or difcolouration of the face and extremities treated by exciting action of furface by heat, and of the primæ viæ by vomiting or a glyfter.

The application of a leech fometimes of ufe when congeftion appears the caufe.

Red Gum.

The red-gum is an efflorefcence of fpots, varying in their fize and appearance, confined to the fuperior parts of the body, particularly the face, cheeks, and neck, fore arms, and back of the hands; but frequently extending alfo in its progrefs

over the whole ſkin. They are generally, though not always, preceded by ſome diſorder of the ſyſtem. They are commonly alſo attended with coſtiveneſs.

Treated,

1. By attention to the ſtate of the ſkin or external ſurface, by preſerving its proper temperature, and recalling the eruption, if ſuddenly repelled, by heat, particularly the ſemicupium, or warm bath.

2. By counteracting the internal acrimony which produces the eruption, by abſorbents and laxatives; as

℞ Pulv. Rhæi, gr. ij.
Magneſ. alb. gr. iij. m. ft.
Pulv. laxans.

℞ Aq. diſtillat. ℥i.
Spt. Nuc. Moſchat.
Syrup. Althæa, ā ʒi.
Magneſ. alb. ℈i. m. *A tea-ſpoonful a doſe twice a day.*

℞ Magneſ. alb. ʒij.
Cinnabar. fact. gr. xij. m. ft.
Pulv. ſubtil. gr. v. to ℈i. *a doſe.*

℞ Tartar. Emetic. gr. ½.
Magneſ. alb. ℈i. m. ft. Pulv. gr. v. *a doſe.*

3. By removing uneaſy ſymptoms, as ſickneſs or depreſſion, by cordials.

℞ Aq. Ammon. comp. ℈i.
Aq. diſtillat.
Syr. Caryophyll. ā ℥ij. m. *Two tea-ſpoonfuls a doſe.*

Retained Meconium.

An accumulation of the meconium, or bile, in a highly animaliſed ſtate, precedes birth; and, when not diſcharged after it, is productive of various complaints, as indigeſtion, flatulence, pain, &c. often aſcribed to a different cauſe.

Removed by various laxatives; as,

℞ Mannæ, ʒi. ſolve in
Aq. fervent. ʒſſ. *A doſe.*

℞ Syrup. Roſæ pallid. ʒſſ. *A tea-ſpoonful a doſe.*

℞ Syrup. de Rhamno.
Simpl. ā ʒij. m. *The ſame.*

℞ Ol. Ricini, ʒſſ. *The ſame.*

℞ Mellis, ℈i.
Seri Lact. ʒi. m. *Laxative Potion.*

℞ Ol. Amygdal.
Syrup. Roſæ,
Aq. diſtillat. ā ʒi. *Two or three tea-ſpoonfuls a doſe occaſionally.*

℞ Magneſ. alb. gr. iv.
Rhuharb. gr. ij.
Sacchar. alb. gr. vi.
Ol. Aniſi, gutt. i. ft. Pulv. *To be given at bed-time.*

℞ Sennæ, ℈i.
Prun. Gallic. N° 3, coque per horæ dimid. in
Aq. Cyath. *Three or four tea-ſpoonfuls every hour till it operates.*

A glyſter of milk and moiſt ſugar may be given lukewarm.

Jaundice.

The icterus infantum is diſtinguiſhed by the ſame yellow colour of the ſkin as in the adult, though in infants the nails are remarked to be free from its tinge. In its progreſs, when continuing ſome time, the yellow deepens, or changes to an orange colour.

Treated by an emetic, ſucceeded by a laxative; and, if prolonged, the uſe of ſaponaceous medicines.

The emetic moſt proper is ipecacuhana; as,

℞ Ipecacuhan. gr. iv.
Syrup. ſimpl. ʒij. m.

The laxative preferred is rhubarb; as,

℞ Pulv. Rhæi, gr. iv.
Syrup. fimpl. ʒij. m. ft. hauft.

When not yielding to a repetition of this plan every two or three days, joined with the affiftance of the warm bath and friction of the abdomen, faponaceous medicines neceffary; as,

℞ Aq. Kali, ʒij. *From two to five drops a dofe in any liquid.*

℞ Sapon. alb. *A fmall bit to be diffolved in milk.*

Rofe.

The infantine eryfipelas confifts of blotches, various in their appearance, and rapid in their progrefs, acquiring foon a purpliſh or leaden hue, becoming exceedingly hard, and tending frequently to mortification.

Treated by the internal ufe of tonics, particularly the bark and aromatics; as,

℞ Decoct. P. C. Peruv. ℥viij.
(Cort. ℈i. ad. Aq. lib. i.) *A table-fpoonful five or fix times a day.*

℞ Conf. Aromatic. ʒi. *A little to be diffolved in each fpoonful of the decoction.*

The beft local applications are antifeptic lotions; as,

℞ Spt. Vinof. camphorat. *Compreffes dipped in it are to be firft wrung out, and then applied to the parts.*

℞ Aq. Lithargyr. Acetat. *The fame.*

Affection of the Nofe.

The ozæna of infancy is diftinguifhed by a difcharge of matter from the nofe, firft purulent, and then fanious; a purple-

ſtreaked eye-lid towards its verge; a difficulty of breathing, particularly in ſleep; and an external fullneſs of the throat and neck, diſcovering, on inſpection internally, the tonſils tumified, of a dark red hue, with aſh-coloured ſpecks, frequently ulceration.

To be treated as the former diſeaſe, by tonic and antiſeptic remedies; alſo,

℞ Pulv. Contrayerv. comp. gr. iij. *To be taken in bark decoction.*

The local treatment, the proper poſition for the diſcharge of the matter, and the uſe of antiſeptic waſhes; as,

℞ Decoct. P. C. P.
Cum Acid. muriatic. gutt. aliquot.

Thruſh.

The thruſh is an eruption of ſpots, appearing generally about the third week, or within the month, on the lips and inſide of the mouth, which continues to ſpread, and at times affects the whole of the alimentary canal, appearing externally at the anus.

Treated by counteracting the ſecretions of the primæ viæ, and by the exhibition of an antimonial emetic; as,

℞ Antimon. Tartar. gr. i.
Aq. fervent. ℥ij. *A tea-ſpoonful a doſe every three quarters of an hour, till vomiting enſues.*

Afterwards, the uſe of abſorbents; as,

℞ Pulv. Contrayerv. C. gr. iij.

℞ Julap. è Creta.
Aq. diſtillat. ā ℥i. *A tea-ſpoonful often.*

When the ſcaling begins, purgatives then proper, as in p. 159; alſo,

℞ Pulv. Scammon. cum Calomel. gr. i.
Rhæi, gr. iij. m. ft. Pulv.

The conſequences of the diſeaſe to be repaired by tonics; as,

℞ Infuſ. Chamæmel. ℥iv.
(Flor. ʒi. ad Aq. lb. i.) *A tea-ſpoonful twice or thrice a day.*

℞ Tinct. Gentian. ℥ſſ. *Five drops a doſe, twice a day, in a little water.*

The local applications to the diſeaſe conſiſt of aſtringents, in various forms; as,

℞ Pulv. Boracis, ʒi.
Sacchar. alb. ʒviij. m. ft. Pulv. *A little to be put often into the mouth.*

℞ Boracis, ℈ij.
Mellis, ℥i. m. ft. Elect. *The ſame.*

℞ Mellis, ℥ſſ.
Spt. Vitriol. vel
Spt. Salis Marin. gutt. ii. m. *The ſame.*

℞ Infuſ. Roſæ Rulræ, ℥ij.
Mellis, ʒij. m. *The ſame.*

Excoriations of anus removed by ſedative waſhes; as,

℞ Extract. Goulard.
Vin. Gallic. ā gutt. xxx.
Aq. Font. ℥iv. *The parts to be bathed with this once or twice a day.*

Skin-bound.

The diſeaſe termed Skin-bound is a peculiar affection, diſplayed in a yellowiſh-white colour of ſkin, its tightneſs or fixed ſtate to the parts below, and its hard reſiſting feel, particularly on the face and extremities. To theſe ſymptoms are joined coldneſs of the child, its apparent pain, and death-like appearance.

The external treatment lies in the uſe of the warm bath, rendered ſtimulant by a ſolution of ſalt and ſoap; in friction, and bliſters.

The internal, in the previous exhibition of a laxative, as in p. 227, and then carminatives and antiſpaſmodics; as,

℞ Pulv. Rhæi, gr. xv.
Magneſ. alb. ʒſſ.
Aq. Fœnicul. dulc.
Anethi, ā ʒvi.
Syrup. Roſæ pallid. ℥ſſ.
Spt. Ammon. comp. gutt. xxx. m. *Two or three ſpoonfuls a doſe, twice or thrice a day.*

℞ Aq. Menth. Pip.
Roſæ, ā ℥i.
Spt. C. C.
Tinct. Valerian. Sylveſt. volat. ā. ʒi.
Syrup. ſimpl. ℥ſſ. m. *The ſame.*

Convulſions.

The convulſions of children are generally preceded by ſlight ſymptoms of diſtortion of the face; as, involuntary laughter when aſleep or awake, ſquinting of the eyes towards the noſe, or turning them upwards, the child, at the ſame time, changing to a blueiſh colour. The fit itſelf is diſtinguiſhed by diſtortions, more or leſs general according to the violence of the attack. Theſe diſtortions are either of the members in ſucceſſion, or of the body all at once. They are attended with the uſual ſymptoms of froth or frothy diſcharge from the mouth; and they are terminated by profound ſleep, from which the child awakes unconſcious of its former ſtate.

The treatment depends on the particular cauſe of irritation.

The lock-jaw treated by cleaning out the primæ viæ, by injection or laxatives, as in p. 227, ſo as to remove the meconium.

The ſpaſm of the part to be then attacked by the warm bath, by local ſtimulants, along with friction and bliſters; as,

℞ Ol. camphorat. ℥i. *A little to be rubbed on the parts.*

℞ Balſam. Anodyn. ℥i. *The ſame.*

The uſe of tonic and ſtimulant medicines proper during this treatment; as,

℞ Julep. Moſchat. ʒij.
Aq. diſtillat. ℥i.ſſ. M. *A tea ſpoonful often.*

℞ Aq. Menth. Pip. ℥ß.
distillat. ℥i.
Ol. Succini, gutt. iv.
Sal. Volat. gutt. ij.
Syrup. simpl. ℥ß. M. *A tea spoonful often.*

℞ Aq. Fœnicul. dulc.
Syrup. simpl. ā ℥i.ß.
L. L. gutt. x.
Moschi, gr. ij. M. *The same.*

Also wine, diluted spirits, and other cordials, are proper.

Inward Fits.

The symptoms which distinguish this second form of early convulsions, termed inward fits, are, a little blueness of the lips, slight turning up the eyes, and a peculiar sound of voice, with quick intervals of breathing.

Treated by the exhibition of an emetic, as in p. 273, and afterwards the use of volatile and fœtid medicines, as in the former disease; also,

℞ Ol. Succini, gutt. vi.
Tinct. Asæ fœtid. gutt. xxx.
Syr. simpl.
Lac Amygdal. ā ℥ij. M. *A tea-spoonful often.*

℞ G. Asæ fœtid. ʒß.
Solve in Aq. Cinn.
Font. ā ℥iv.
Tinct. Valerian. volat. ʒi.ß. M.
The same.

Abdominal Complaints.

The chief abdominal complaints that attend infancy are wind and costiveness; and these complaints assume various symptoms, from simple griping pain and crying, drawing-up the legs and scrotum to the height of actual spasm, and convulsions.

The use of laxatives, combined with aromatics, the proper remedies; as,

℞ Tinct. Aloes comp. ʒij. *From five to ten drops a dose, in any liquid.*

℞ Pulv. Sennæ, gr. ij.
Zinziber. gr. i. to v. Pulv. *To be given in pop.*

℞ Magnes. alb. gr. iv.
Aq. Anethi, ʒij.
Syrup. Rosæ, ʒi. M. ft. haust. Laxans.

℞ Pulv. Rhæi, gr. xii.
Magnes. gr. viij.
Tinct. Rhæi, ʒi.
Syrup. Papaver. ʒij.
Aq. Menth. ʒi.ss. M. *Two or three tea-spoonfuls a dose every four hours.*

℞ Ol. Ricini, ʒij
Mucilag. G. Arabic.
Syrup. Mannæ, ā ʒi.
Spt. Ammon. Comp. gutt. x. M. *Two tea spoonfuls a dose.*

Where these laxatives are not sufficient, a suppository may be used to remove costiveness; or, instead of it, some of the drastic purgatives; after which, the former remedies will be sufficient.

The best purgative is a glyster of milk, in which 20 grains of aloes are dissolved.

When wind is the chief symptom of uneasiness, external heat, either dry, or by fomentation, affords the quickest relief.

Attention to the food necessary, to prevent a relapse.

Watchfulness.

To be treated as arising from the former complaints, or by a proper regulation of the child, in regard to the times of sleep.

Vomiting,

In children, is seldom an idiopathic disease; it is generally a consequence of some other morbid state.

When from repletion, no treatment necessary.

When from disease, to be treated according to the particular cause.

Thus, when the four ſmell, or green clayey ſtools, mark predominant acidity, abſorbents the proper remedy; as,

℞ Magneſ. alb. ʒij. *A little to be mixed with the food, and given often.*

As alſo he alkaline preparations in p. 274.

When from morbid irritability, tonics are then indicated; as,

℞ Infuſ. C. Peruv. ℥iv.
(ʒi. to ℥iv.) *A tea ſpoonful or two a doſe.*

℞ Flor. Chamæmel. ʒi.
Cort. Aurant. gr. x.
Pulv. Zinziber. gr. v.
Infunde in Aq. ℥v. et cola. *The ſame.*

Or external applications of the ſame kind; as,

℞ Balſam. Anodyn. *A little to be rubbed on the pit of the ſtomach.*

℞ Spirit. Vinoſ. Camphorat. *The ſame.*

℞ Emplaſt. Labdani, ℥ſſ.
Theraic. ʒi. m. ft. Emplaſt. *To be applied on the region of the ſtomach.*

℞ G. Maſtic.
Stor. Calamin.
Pulv. Nuc. Fr. Myriſticæ
Ol. Myrti.
Flor. Balauſt. ā ʒi.
Ceræ et Terebinth. ā q. ſ. ut ft. Emplaſt. alut. extenſ.

℞ Ungt. Simpl. ʒiij.
Ol. Macis.
Roſmarin. ā ʒſſ.
Balſam. Peruv. ʒij. m. ft. Ungt. *With a little of which the region of the ſtomach is to be frequently anointed, and then covered with warm flannel.*

When from ſuppreſſed eruption, marked by the preſence of

general fever, it is to be recalled by means of the warm bath, the application of friction after it, and a blister or warm plaster to the region of the stomach, with the proper use of cordials.

When from interrupted discharge, the return of the latter is to be solicited by some irritating application.

Inflammation of Stomach.

The gastritis infantum is a rare disease, and distinguished by great pain in the region of the stomach, very frequent in its recurrence, and marked by violent contorsions or writhings, and the application of the child's hand to the part.

Treated by cooling laxatives, as in p. 227.

When more severe by blisters to the part, by fomentations, and the warm bath.

Gripes

Are treated as abdominal complaints, p. 278.

Looseness.

Diarrhœa is one of the most frequent complaints of infancy, and one which, unless severe, is hardly to be considered in children as a real morbid state. By it, nature, with them, most commonly throws off any offending cause. Its causes, therefore, and treatment, require very particular attention.

To be treated according to the particular indication arising from the appearance of the discharge, and the cure to be always premised by an emetic, as in p. 227.

When the discharge indicates predominant acidity, rhubarb and absorbents the chief means of cure, with an occasional anodyne.

℞ Pulv. Rhæi, gr. xv.
Cret. alb. ℈i.
Sacchar. alb. ʒi.
Aq. Menth.
Font. ā ʒi. ff. m. *Two tea spoonfuls a dose.*

℞ Pulv. Cret. alb. ℈ij.
Conf. Japonic. ℈i.
Sacchar. alb. ʒi.
Aq. Anethi, ʒij. m. *The same.*

℞ Vin. Rhæi, gutt. x.
Tinct. Opii, gutt. ij.
Aq. Cinn.
Syr. Simpl. ā ʒi. m. fiat hauſt.

When ſtool ſlimy, alkalies required, as in p. 228.

When watery, bloody, and dyſenteric, a ſmart purge ſhould premiſe, as in p. 227; and then cordials and glyſters of warm milk and demulcents ſucceed.

Dentile diarrhœa demands a difference in the treatment, though the cure depends on the operation or protruſion of the teeth.

Watery gripes, or infantile dyſentery, is more obſtinate in its effects.

An emetic ſhould be premiſed here in a full doſe, followed by a laxative; and the reſt of the treatment to be varied according to the particular ſymptoms.

If ſymptoms mild, the cure then is to be truſted to ſmall doſes of ipecacuhan or antimony; as,

℞ Pulv. Ipecacuhan. gr. i.
Magneſ. alb. gr. xvi.
Pulv. Aromat. gr. vi. m. et divid. in doſ. viij. *One every four hours.*

℞ Vin. Antimon. gutt. xij.
Aq. Cinn.
Syrup. Cois, ā ʒiij. m. *A tea-ſpoonful a doſe every four hours.*

If a predominant acidity ſeems to continue the irritation alkalies then proper, as in p. 226; alſo,

℞ Tinct. Myrrh.
Spt. Ammon. ſuccinat. ā ʒij. m. *Five drops a doſe, in any liquid.*

℞ Sapon. Venet. ʒij.
Margarit. preparat. ʒi.
Chel. Cancr. ʒi. ſſ.
Syrup. Altheæ, ʒſſ.
Aq. Menth.
Anethi, ā ʒiij. m. *A large tea-ſpoonful every ſix or eight hours.*

When weakneſs, not irritation, occurs to keep up the diſcharge, aſtringents, tonics, and anodynes then proper; as,

℞ Balſam. Locatelli, ʒi.
Conſerv. Roſæ rubræ, ʒij. m. *The ſize of a bean a doſe, three or four times a day.*

℞ Decoct. Lign. Campechenſ. ʒviij. *A table-ſpoonful a doſe.*

℞ Amyli. ℈i.
Aq. Cinn. ſ. ʒſſ.
Tinct. Opii, gutt. v.
Sacchar. alb. ℈ij. m. ft. hauſt.

℞ Ennema ex Amylo.
Cum L. L.

External applications are alſo here employed; as,

℞ Axung. Anſerin. ʒij.
Ol Maciſ. ʒi.
Menth. Sativ. ℈i.
Bacc. Juniper.
Chamæmel. ā ℈ſſ. m. ft. Liniment. *The region of the ſtomach and umbilicus to be frequently anointed with it.*

℞ Theriac. Venet. ʒi.
Ol. Maciſ. ʒij.
Ol. Myriſtic. gutt. iij. m. et ft. emplaſt.

Incontinence of Stools.

Palliated by cold affuſion till the parts acquire ſtrength.

Worms.

The ſymptoms enumerated as diſtinguiſhing worms are, pain and acid eructation of ſtomach, variable appetite, foul tongue, fœtid breath: the belly full, hard, and tenſe, with occaſional gripings or pains in different parts of it, particularly about the navel; irregular ſtate of the belly, heat and itchineſs of the rectum, urine white and limpid, often diſcharged with difficulty. With theſe ſymptoms are joined a dull appearance of the eye, often dilation of the pupil, itchineſs of the noſtrils, ſhort dry cough, ſlow fever, with evening exacerbations, and irregular pulſe, grinding of the teeth in ſleep, &c.

Their treatment depends on effecting their expulsion, and preventing their future generation.

The first accomplished by means of the different medicines detailed in vol. I. p. 341. Also,

℞ Hydrargyr. cum Sulphur. ʒi.
Pulv. Rhæi, ℈iv. m. et divid. in dose No. 28.
One twice a day.

℞ Hydrargyr. cum Cretâ,
Magnes. alb. ā gr. vi. m. ft. Pulv. *To be taken at bed-time.*

℞ Limatur. Stanni, ʒij.
Hydrargyr. ʒiij. m. ft. Amalgam.

℞ Hujus Amalgam. gr. viij.
Pulv. Rhæi, gr. iv.
Calc. Antimon. illot. gr. iij.
Mellis, q. s. ut ft. Bolus. *To be taken every morning.*

℞ Pulv. Rubig. Ferri, gr. v.
Sacchar. alb. gr. x. m.

℞ Auri Musiv. ℈ij. *To be taken twice a day in any convenient vehicle. To be followed by a purge every fourth or fifth day.*

External applications are also favourite remedies for worms; as,

℞ Aloes Succot.
Pulv. Flor. Chamæmel. ā ʒi.
Terebinth. Venet. q. s. ut ft.
Emplast. *To be applied to the region of the navel.*

℞ Fel. Bovin.
Aloes, ā ʒi.
Axung. ʒi. m. ft. Linim. *The parts below the navel to be anointed with it twice or thrice a week.*

Convulsions.

The appearance of infantine convulsion differs nothing from that which attacks the adult. The body becomes either convulsed

all at once, or the limbs; the jaws are locked, and the mouth filled with flime. In this ſtate the child continues till ſleep ſupervenes, from which it awakes pretty well, till the ſame appearances are renewed at intervals of various diſtance. It is divided into two ſpecies, the ſymptomatic and idiopathic.

Symptomatic.

When from ſtate of the primæ viæ, or adheſive nature of the food, its treatment depends on change of diet and the uſe of laxatives, particularly the caſtor oil, as in p. 273.

When from teething, the protruſion ſhould be haſtened by ſcarrification.

When from retropelled eruption, the warm bath uſeful, and ſoliciting a diſcharge by bliſters.

When from worms, the remedies to be employed detailed in that diſeaſe, vol. I. p. 341.

Idiopathic.

The treatment here conſiſts in the moſt powerful means of removing general irritation, by blood-letting, by leeches to the foot or behind the ears, by bliſters, and by proper exhibition of laxatives.

When ſymptoms ſtill continuing, antiſpaſmodics then indicated, as in p. 232. Alſo,

℞ Aq. diſtillat. ℥ij.
Tinct. Valerian. volat.
Spt. Ammon. fœtid. ā ʒſſ.
Caſtor. Ruſſic. ℈i.
Sacchar. alb. ʒij. m. *A tea-ſpoonful a doſe.*

℞ Aq. Font. ℥ij.
Tinct. Fuligin.
Valerian. volat. ā ʒſſ.
Syrup. ſimpl. ℥ſſ. m. *The ſame.*

℞ Caſtor. ℈i.
Sal. C. C. gr. viij.
Aq. Cinn.
Font. ā ℥i. ſſ.
Conſ. Damocrat. ℈i. m.

℞ Mucilag. G. Arabic. ʒi. ff.
Syrup. ſimpl. ʒij.
Ol. Aniſi.
Rutæ, ā gutt. iv. m. *The ſame.*

℞ Spermaceti, (v. o. f.) ʒi.
Aq. diſtillat. ʒiij.
Syrup. Tolotan. ʒſſ.
Ol. Aniſi, gutt. xii. m.

℞ Moſchi, gr. x.
Aq. diſtillat. ʒij.
Syrup. Zinziber. ʒi. m.

External applications are alſo employed with the ſame view; as,

℞ Balſam. Anodyn. ʒſſ.
Ol. Macis, ʒi.
Ol. Menth. ℥i. et ft. Ungt. *With which the back-bone, palms of the hands, and ſoles of the feet, are to be anointed.*

℞ Ol. Oliv. ʒi.
Ol. Succini, gutt. xxx.
Ol. Terebinth. ℥i. m. ft. Liniment.

Where convulſions aſſume a chronic form, an iſſue then proper; with the uſe of tonics, particularly chalybeates, in the form of a mineral water.

Palſy

Is a rare diſeaſe in children: it does, however, occur at times, and that in different degrees, the ſame as in adults.

The treatment requires particular attention to the ſtate of the primæ viæ, as in p. 227; afterwards the uſe of antiſpaſmodics, internal and external, as in the former diſeaſe, or electricity.

When connected with hydrocephalus, the treatment of this laſt forms the primary indication.

Epilepſy

Conſiſts in the child ſuddenly and unconſciouſly falling down; when convulſion takes place, either with or without the loſs of the ſenſes.

The treatment the ſame as in convulſions; by firſt removing irritation of the primæ viæ, by laxatives, and afterwards the uſe of tonics and antiſpaſmodics.

St. Vitus's Dance.

This diſeaſe conſiſts of partial convulſions, or continual motion, of the extremities of one ſide, ſeldom extending its attacks beyond the fifteenth year. Its cauſes are, generally, predominant irritation in the primæ viæ, of various kinds, or elſe general relaxation of the ſyſtem.

To be treated as in the former diſeaſe, by attention to the firſt paſſages and the uſe of tonics.

Night-mare

is an affection well known: it conſiſts of a ſenſe of oppreſſion, weight, and tendency to ſuffocation, varying in its period of duration, and alſo in the degree to which it attains. It is an affection common to children as well as adults; and it can hardly be deemed a diſeaſe, as they frequently outgrow it. The fit, however ſhort in duration, always leaves ſome unpleaſant effects, as lightneſs of head, tremor, and anxiety; but theſe are merely temporary.

Treated by avoiding flatulent diet, and rouſing from the fit by volatile and fœtid medicines, as in the former diſeaſes.
The cold bath and tonics are proper preventatives.

Temporary Loſs of Speech,

or a difficulty in utterance, is frequent with ſome children, from the fourth to the ſeventh year. It forms in its attack only a temporary inconvenience, ſeldom exceeding a quarter of an hour at a time.

To be treated as the other convulſive diſorders deſcribed.

Excoriations of Skin.

Excoriations of different parts of the cuticular surface, either from its delicacy or particular causes of irritation, is a common complaint of children; but the part most liable to this, and requiring often a special treatment, is behind the ears.

Simple excoriation requires only cold washing or affusion, and the application of some mild astringent, as the singed rag.

The ulcerated species to be treated first by absorbent laxatives, as in p. 226; afterwards by some alterative preparation of mercury, as

℞ Hydrargyr. cum Sulphur. gr. v. *for a dose.*

℞ Calomel. gr. i.
Pulv. Rhæi, gr. ij. m. ft. Pulv. *The same.*

To the part itself the same applications may be made; as,

℞ Calomel. ʒi.
Ungt. Sambuc. ℥i. m. ft. Ungt.

Blisters occasionally useful in the neighbourhood.

Auricular Abscess.

Matter discharged from the ears in various quantities, and also with various appearances of inflammation, both in degree and extent, are common to childhood.

To be treated by obviating inflammation, by the use of laxatives, as in p. 227, and giving a discharge to the matter; afterwards using astringent washes, as in vol. II. p. 413; and, if ineffectual, having recourse to warm stimulants, as in vol. I. p. 34. and vol. II. p. 440.

℞ Ol. Amygdal. ℥ß.
Camphor. ℈i. *A little to be dropped in the ear.*

℞ Ol. Amygdal. ℥ß.
Spt. Lavend. C.
Tinct. Castor. *a* gutt. xxx. m.

℞ Aq. Lithargyr. acetat. gutt. x.
Spt. Camphorat. gutt. xx.
Aq. diſtillat. ℥viij. m. ft. inject.

When reſiſting this treatment, mercurial alteratives to be given, as in the former affection, an iſſue opened near it, and purgatives employed to the part.

Fevers.

The fevers of infants are generally ſymptomatic, and not ſuch as occur in the adult.

Catarrhal Fever

is diſtinguiſhed by cough, hoarſeneſs, and difficulty of breathing, with affection of the noſe and eyes, only varying from the catarrh in the adult by the violence of its ſymptoms.

The treatment conſiſts in leſſening the irritation on the breaſt by blood-letting, by a leech or two to the foot, followed by the application of a bliſter to the region of the ſtomach.

If much phlegm, an emetic may then be exhibited, as in p. 227.

The uſe of oily medicines will quiet the irritation of the cough; as,

℞ Ol. Amygdal.
Syrup. Violar. ā ℥i.
Spermaceti, ℥i. m. *A tea-ſpoonful a doſe often.*

℞ Pulv. Tragacanth. comp.
Spermaceti, ā ℥i.
Syrup. ſimpl. ℥ij. m. *The ſame.*

℞ Syrup. Papaver. ℥i. *The ſame.*

The bowels, in the progreſs, to be kept open by laxatives, as p. 227.

Stomachic Fever.

The leading indication here is the exhibition of an emetic, when relief of all the ſymptoms will follow.

Inteſtinal Fever.

To be treated in the ſame way, followed by laxatives, either abſorbents, as in p. 226; or draſtics, as in p. 227, according to circumſtances.

When fever protracted, ſaline draughts, with antimonials, proper, as in vol. I. p. 274, and afterwards the bark.

Conſequences of Fever.

The appearance of eruption muſt be left to time.

Cervical pain and tumor yield to heat and embrocations, as in p. 229.

Intermittent Fever.

Its ſymptoms are the ſame as in the adult, conſiſting in a regular ſucceſſion of cold, hot, and ſweating fits, with the intermiſſion of a certain period before their repetition; and this intermiſſion is chiefly diſtinguiſhed by a high-coloured urine, with a laterious or red ſediment.

To be treated in the ſame way as in the adult, vol. I. p. 274.

Firſt premiſing an emetic, then continuing mild diaphoretics for ſome time, as in p. 98, and afterwards throwing in the bark, as in vol. I. p. 340.

The bark often employed externally here, as by poultice to the ſtomach, or quilted in a waiſtcoat.

Ague-cake, if forming, to be treated as in the adult, vol. I. p. 327.

Dentition.

The ſymptoms that mark dentition are—

1. A tendency to drivel or ſlaver much, with ſtarting, and thruſting the fingers into the mouth.

2. Expanſion, heat, and ſwelling of gum.

3. A circumſcribed red or ſeptic flush on the cheek.

4. Eruptions on the face and ſcalp.

5. Diarrhœa, with its uſual irritation, or griping and morbid ſtools.

6. Spaſms, and general irritation of the nervous ſyſtem, preventing ſleep.

7. Alteration in the ſecretion and appearance of the urine; and,

8. Sometimes ſwelling of the extremities, though rare.

The morbid ſtates then requiring relief are the dentile fever and convulſion.

The dentile fever treated by dilution and keeping up diarrhœa by laxatives, as in p. 227, or by ſmall doſes of antimonials.

In retention of urine, clyſters and the warm bath neceſſary.

Where diarrhœa ſpontaneous and exceſſive, to be reſtrained by the teſtacea, joined with compound ſpirit of ammonia or laudanum.

The Dentile Convulſion.

Treated in the ſame manner as fever, along with the application of bliſters behind the ears or to the back; but the moſt certain relief ariſes from the operation.

Inflamed and ulcerated gums, during dentition, to be treated by cooling ſedative applications; as honey ſharpened with a little weak vitriolic acid, ſyrup of white poppies; or, failing theſe, aſtringent applications are to be made, as employed under the head canker.

Mumps.

The mumps are a ſwelling of the neck and throat, or the parotid and maxillary glands, from the appearance of which the name is derived; attended with reſpiration and deglutition little impeded, and inflammatory fever generally ſlow.

To be treated by mild diaphoretics, as in vol. I. p. 274, and an occaſional laxative, as in p. 227.

Conſequences of the diſeaſe, or chronic ſwelling of the part, to be obviated as in vol. II. pp. 429 and 435.

Croup.

Croup is a diſeaſe formerly treated of, vol. I. p. 15. Its ſymptoms are, a ſharp ſhrill cough, with ſtridulous noiſe; laborious or

wheezing reſpiration; flushed face, increaſed to lividity during each paroxyſm; little external ſwelling, and general fever.

Treatment as in vol. I. p. 282.

A more modern practice is, the uſe of opium and emetics.

The Tinct. Opii is given in doſes of ſix or eight drops, every two hours, till a remiſſion of the ſpaſm takes place; and an emetic, exhibited daily, to prevent the accumulation of phlegm.

Symptomatic coughs cannot be disjoined, in their treatment, from that of the diſeaſe with which they are connected.

Chin-cough.

The chin-cough, or hooping-cough, is a contagious diſeaſe, attacking in paroxyſms of a convulſive ſuffocating cough, with loud noiſe or hoop at each reſpiration, and generally terminating by vomiting.

Treatment depends on the ſtate of the ſyſtem, or the tendency to inflammation or ſpaſm.

In the firſt, bleeding and bliſters become neceſſary, with the uſe of mild diaphoretics, as in vol. I. p. 274; and an occaſional laxative, as in p. 227.

In the ſecond, emetics and antiſpaſmodics form the chief remedies, as in p. 240; alſo,

℞ Antimon. Tartar. gr. ij.
Cryſtall. Tartar. gr. v.
Aq. diſtillat. ℥v. m. *A tea-ſpoonful every half hour.*

Where cough very troubleſome, an opiate uſeful, particularly the cicuta; as,

℞ Lact. Ammoniac. ℥iv.
Extract. Cicut. gr. ij. m. *A table-ſpoonful a doſe.*

℞ Julep. è Moſcho. ℥vi.
Tinct. Opii camphorat. ℥ſſ.
Tinct. Valerian. volat. ℥i. *Two tea-ſpoonfuls thrice a day.*

℞ Lact. Ammon.
Aq. Cinn. ten. ā ℥ij.
Tinct. Caſtor. ℥ij.
Syr. Balſam. ℥ſſ. m. *The ſame.*

External antiſpaſmodics are alſo employed here; as, rubbing the hands and ſoles with ſpirit of ammonia; oil of mace, or amber, to the ſpine and pit of the ſtomach; anointing the ſoles with ointment of garlic and hogs'-lard.

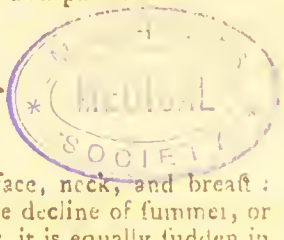
The recurrence of the diſeaſe is cut ſhort by an emetic, and a return to the uſe of antiſpaſmodics.

Change of air and milk diet are proper additions to the treatment.

Common Spaſmodic Cough.

This complaint is marked by the ſame appearance of cough as chin-cough; but no fever attends it. It differs alſo from catarrh in the abſence of the catarrhal ſymptoms, and alſo in antiphlogiſtic remedies having no effect.

Its treatment requires ſimply the uſe of antiſpaſmodics.



Cutaneous Diſeaſes.

Raſh.

The moſt common ſeat of raſh is the face, neck, and breaſt: its appearance is moſt common about the decline of ſummer, or the months of Auguſt and September: it is equally ſudden in its eruption and departure. A little ſickneſs is apt to ariſe when this laſt takes place, but it is merely temporary.

Attention to the primæ viæ the only treatment required; and, where coſtiveneſs prevails, laxatives employed, as in p. 227.

Baſtard Itch.

Baſtard itch is an eruption affecting the face with watery-headed veſicles and foul blotches, reſembling, in its appearance, the common itch or pſora: it is chiefly peculiar to the period of teething, and the decline of acute febrile or inteſtinal complaints.

Treatment, avoiding cold, and the ſame medicines as in raſh.

Milk Blotches.

The cruſta lactea, or milk blotches, is an eruption of white veſicles, which aſſume a dark colour, reſembling the blackening

of the ſmall-pox, and are ſucceeded by ſcabs producing an ichory matter, attended with conſiderable itchineſs.

To be treated by ſome ſulphureous mineral, or an infuſion of the viola tricolor.

℞ Pulv. Violæ, ʒi. coque in Lact. lb. i. fl. ad lb. i. *To be taken in the courſe of the day.*

Anomalous Eruption.

Anomalous eruptions, during the time of teething, are ſo various in their appearance, that no certain deſcription can be given of them.

Their treatment conſiſts in moderating fever, if preſent, by mild diaphoretics, as in vol. I. p. 274; and attention to the primæ viæ.

Nettle-raſh.

This is a raſh affecting the breaſt and lower limbs, with an appearance reſembling the ſtinging of nettles.

Its management requires ſome mild ſudoriſic, as in vol. I. p. 274, and regulating the ſtate of the primæ viæ.

Phlyctenæ.

Phlyctenæ conſiſt of veſications or bliſters ſimilar to burns, varying in their ſize and the period of their continuance, which is generally ſome days. They contain an acrid lymph when opened.

The uſe of abſorbents indicated, as in p. 226.

Scorbutic Eruption.

This is an eruption which diſcharges a thin ſharp ichor, and infects the face and neck, attended with excoriation wherever it touches.

Treatment difficult. The water-parſnip reckoned ſpecific, with attention to the ſtate of the primæ viæ.

℞ Succ. Sii, Aquat. lb. i. *A ſpoonful four or five times a day in milk.*

Grocer's Itch.

This eruption appears in ſome parts like the points of pins, with watery heads; at other times as large as peas, which do not itch or feel ſore. But it appears alſo frequently in foul blotches, which degenerate into ſcabby ſores.

Its treatment by mercurial alteratives, as in vol. I. p. 345, and vol. IV. p. 242; and externally by the ſame applications; as,

℞ Ungt. Hydrar. Nitrat.
Sulphur. ā ʒſſ. *To be applied to the ſores.*

Ring-worm.

A ſpecies of herpes, or broad ring-worm, is very apt to affect thoſe parts of the child that are fretted by its dreſs. The ſkin exhibits a very inflamed appearance, without much pain.

To be treated as phlyctenæ.

Small-pox.

The ſmall-pox is a fever generally of the inflammatory or typhoid ſpecies, attended with a local inflammation and pain of particular ſeparate points of the internal and external ſurface, forming an eruption. The appearance of this eruption is from the third to the ſeventh day of the fever, terminating in eight days from this appearance by the falling off of cruſts, which leave a pit or mark behind.

To be treated as in vol. I. p. 293; and alſo, when bark uſed in confluent kind.

℞ Cinchonæ in Pulv. trit. ʒiij. ſſ.
Myrrh. in Pulv. ʒſſ.
Spt. Vin. ten. lb. i. degere et cola. *A tea-ſpoonful thrice a day, with the addition of ten drops of diluted vitriolic acid.*

℞ Cinchonæ,
Flav. Pulv. craſſ. ℥ſſ.
Roſar. rubr. exſiccat. ʒij.
Aq. fervent. ℥xij.
Macera et cola,
Infuſ. ℥vij. adde
Acid. Vitriol. dilut. ʒi. m. *A cupful every four hours.*

℞ Decoct. Peruvian. ℥i. ſſ.
Spt. Cinn. ʒi. ſſ.
Acid. Vitriol. dilut. gutt. x.
Syrup. Croci, ʒi.
Tinct. Opii, gutt. iv. m. ft. hauſt.

Meaſles.

The meaſles are a continued inflammatory fever, attended with an eruption in the form of cluſters, little prominent, and reſembling flea-bites, marked by a vivid redneſs, gradually decreaſing till deſquamation enſues.

To be treated as in vol. I. p. 293.

Chicken-pox.

The chicken-pox reſembles the ſmall-pox ſomewhat in its general appearance; but it differs from it in its ſymptoms, in its progreſs, and in its duration.

Requires no ſpecial treatment but a laxative.

Scarlet Fever.

The ſcarlet fever, in infancy, is for the moſt part of the typhoid form, with or without an affection of the throat, and always marked by a roſy efflorescence of the ſkin.

To be treated, when of the mild kind, as in vol. I. p. 274. When ſhowing a putrid tendency, bark and acids to be exhibited, as in confluent ſmall-pox, vol. I. p. 293.
Antiſeptic gargles alſo to be uſed, as in vol. I. p. 319.

Miliary Fever.

The miliary fever is a diſeaſe rarely attacking children, unleſs epidemic; and then it is diſtinguiſhed by the uſual ſymptoms, as in other caſes.

To be treated as in vol. I. p. 274.

Scald Head.

Tinea conſiſts of a ſcaly eruption of the ſkin of the head or hairy ſcalp. It is attended with various degrees of acrimony, and becomes accordingly more or leſs infectious in its nature.

The preliminary ſtep—ſhaving the head, or cutting the hair cloſe; and the bathing the head with ſoap and water, or cream and honey, or with the following fomentation:

℞ Fol. Abſinthii,
Abrotan. ā ℥i. coque in
Aq. Font. lb. iv. ad. lb. i. ſſ. adde
Spt. Camphorat.
Aq. Kali, ā ℥ij. m.

℞ Infuſ. Nicotianæ.

To be afterwards cured chiefly by topical applications, as in vol. I. p. 346. Alſo,

℞ Ungt. Sulphur.
Hydrargyr. ā ℥ſſ. m. *A little to be rubbed in every night.*

℞ Ungt. Nicotianæ, ℥i.
Petreol. Barbad. ℥ſſ.
Balſam. Peruv. ℈i. m. ft. Ungt.

℞ Ungt. è Pice, ℥i.
Pulv. Hellebor. alb. ℥i. m. ft. Ungt.

℞ ℔ corroſiv. ſublimat. gr. x.
Aq. diſtillat. lb. i. m. *Waſh for the ſores.*

℞ Flor. Sulphur.
Pulv. Sinapi.
Staphesa-griæ, ā ʒi.
Axung. Porcin. ʒi. m. ft. Ungt.

When the disease is obstinate, internal alteratives may be proper, as a grain of calomel every night, or a dose of Æthiop's mineral washed down with the decoction of wood, as in p. 158, or lime-water. An issue in the neck will be also useful.

Itch.

This disease we already considered in vol. I. p. 221 : it is chiefly introduced here to remark some peculiarities in its treatment in infancy.

To be treated as in vol. I. p. 345.

Shingles.

The herpes, or shingles, is of two kinds; the miliaris, or ringworm, and the exedens.

The miliary kind is to be treated chiefly by stimulating and astringent applications, as ink thickened with mustard flour, spirit of wine, and saturnine or zinc lotions, as in vol. II. p. 413. Of ointments, the nitrated mercury is best.

The eating or ulcerous herpes is to be attacked by internal remedies, as in vol. I. p. 220.

The external applications are the same as in the former species; and, when obstinate, caustics may be occasionally proper.

Venereal Disease.

The lues of infancy we find generally displays itself first about the genitals and nates; more rarely it attacks the face, breast, and lower extremities. Its appearance in these situations is first in the form of copper-coloured pustules, similar to what distinguish the second stage of the constitutional disease in the adult. These pustules spread, and the body is covered with an appearance from them of what are commonly named *syphilitic spots*. Instead of pustules, however, it is frequently ob-

ſerved in the form of livid blotches. Whichever of theſe appearances it aſſumes, it continues to ſpread about the face, eyebrows, chin, &c. having the ſame appearance as when recovering from the confluent ſmall-pox. The mouth alſo comes internally to be affected, and here it diſplays an appearance ſimilar to aphthæ. Theſe change into ſores, and gradually ſpread backwards to the fauces, and forwards to the lips and noſtrils, occaſioning ſtoppage of the noſe, difficulty of breathing, and other ſymptoms attending an impeded action of theſe parts. The nurſe's nipples then begin to turn raw, and to aſſume the appearance of chancre; and in this way the diſeaſe is tranſmitted from the child. With time, the body of the child becomes wholly covered with ulcerations; but, before arriving at this height, the conſtitutional diſeaſe generally diſplays itſelf on the nurſe by ulcerations of the throat.

In the cure, mercury is the chief remedy to be either given to the nurſe or the child.

The former is more uncertain, and will alſo ſeldom be ſubmitted to; the latter, therefore, is preferred.

To be given in two forms of calomel, or Van Sweeten's ſolution; as,

℞ Calomel, gr. i.
Sacchar. alb. gr. ij. m. ft. Pulv. *Powder a doſe, and to be repeated every night for eight nights; then the ſame doſe, every other night, for twelve nights.*

℞ Solut. corroſiv. ſublimat.
Ut in p. 156. *Thirty drops a doſe every night in milk.*

℞ Liquoris Hydrargyr.
Muriat. ut in p. 196, 3ff.
Decoct. Sarſæ, ut in vol. II. p. 426, lb. i. m. *A table-ſpoonful every night.*

King's Evil.

Scrofula is very various in its appearance, and extended in its ſeat. Its primary ſymptom is the ſwelling of the lymphatic glands, ending in ulceration: this ulceration extends it to other parts; and, in its progreſs, the whole of the ſyſtem appears to take on the morbid ſtate.

The treatment directed in vol. I. p. 337; and in vol. II. pp. 429 and 435; alſo,

℞ Ammon preparat. ʒij.
Rad. Gentian. Inciſ. ℈i.
Affunde Spt. Vin. Gallic. ℥xij. ft. tinct.

A tea-cupful in a glaſs of water, three or four times a day.

℞ Æthiop. Mineral.
Vegetab. ā ʒij.
Milleped. preparat.
Spong. uſt.
Sulphur. precipitat. ʒiij.
Conſerv. Lujulæ, ʒvi.
Syr. Altheæ, q. ſ. ut fiat elect.

The ſize of a nutmeg night and morning.

The local treatment detailed in p. 199 and 211; alſo,

℞ Ungt. Altheæ,
Fel Bovin. recent.
Sapon. Venet. ā ʒiij.
Petrolei, ʒij.
Sal Cornu Cervi volat. ʒſſ.
Camphor. ʒi. m. et trit. bene, ut ft. Ungt.

A ſmall quantity to be frequently rubbed in on the ſwelling.

℞ Camphoræ, ʒi.
Spt. Sal volat. Ammon. ʒiij.
Ol. Olivæ, ℥ſſ. m. ut ft. Ungt.

℞ Scillæ Recent. in
Pulp. redact. ʒi.
Alkali Cauſtic. ʒi.
Exprime per Linteum, et miſce cum Mellis
Ungt. Baſilicon. ā ʒi. ut ft. Ungt.

℞ Emplaſt. Galban. ʒi.
Camphor. ʒi.
Petrolei, ʒij.
Sal Volat. C. C. ʒſſ. m. ut ft. Emplaſt.

Watery Head.

Hydrocephalus, or the watery-head, is a diſeaſe peculiar to infancy. It is of two kinds; the external and internal. The former is generally coeval with birth, or precedes it: the latter, however, is moſt frequent in its occurrence, and generally fatal in its termination.

External.

Treatment, the frequent application of bliſters along the courſe of the ſinus, and afterwards keeping up a diſcharge.

Internal.

This diſeaſe is diſtinguiſhed by pain of head acroſs the brow, accompanied with nauſea, ſickneſs, and other diſorders of the animal functions, without any evident cauſe, and ſudden in their attack; variable ſtate of pulſe; conſtant ſlow fever; and, in the advanced ſtage of the diſeaſe, dilatation of the pupil of the eye, with a tendency to a comatoſe ſtate.

Treatment detailed in vol. I. p. 333, and it depends on bleeding, bliſtering, and iſſues, in early ſtage.

In the more advanced, on mercury and diuretics.

The mercury is to be uſed in liberal doſes, in the form of calomel, or by unction.

The diuretics preferred are, the digitalis and doronicum Germanicum.

The effects of the diſeaſe are to be obviated by the uſe of tonics, as in vol. I. p. 299.

Meſenteric Fever.

Meſenteric fever is moſt common in its attacks from the age of three or four years. It is irregular in its paroxyſms, occaſionally remitting, and at other times entirely intermitting. It is attended with loſs of appetite, ſwelled belly, pain of bowels, daily attacking and alternating with periods of eaſe, and ſome days it is entirely abſent. The child ſenſibly falls off; it cannot walk, if formerly able to do it; and inclines to lie much in one poſture, from the languor and debility induced; a general flaccidity and paleneſs of countenance is conſpicuous; and, in the

The treatment directed in vol. I. p. 337; and in vol. II. pp. 429 and 435; also,

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The ſize of a nutmeg night and morning.

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progress of the disease, the mesenteric affection becomes visible, by the increased size of belly, its hardness, and pain.

Treatment regulated by the stage of the disease.

First stage treated by clearing the bowels, followed, alternately, by the use of calomel and neutral salts, on successive days; and this plan regularly continued till a remission takes place.

Second stage treated by mercurial friction to the abdomen, and the external remedies enumerated vol. II. p. 446.

Internally, narcotics and neutral salts should be exhibited; as,

℞ Decoct. Cicut. ℥viij.
Sal Natron. ʒi. m. *A tea-spoonful three or four times a day.*

On a remission taking place, tonics then indicated, as in vol. I. p. 299.

Hectic Fever

Must be regulated in its treatment by the primary disease, of which it is a consequence.

Rickets

Consist in an enlargement of the head anteriorly, and in a swelling of the joints, flattened ribs, protuberant belly, and general emaciation, with a bloated or florid countenance.

Treatment, as detailed in p. 165; also,

℞ Hydrarg. è Sulphur.
Pulv. Rhæi, ā gr. v.
Aromat. gr. ij. m. ft. Pulv. *To be given thrice a week.*

℞ Tinct. Ferri muriat. ℥ss. *Five to 20 drops a dose, in a glass of bark decoction, twice a day.*

℞ Ferri Ammoniac. gr. ij. *A dose every night.*

External treatment, as directed in p. 280; also,

℞ Ol. Palmæ, ʒij.
Balsam. Peruv.
Ol. Nuc. Moschat. ā ʒi.
Spt. Ammon. ʒij. Succin. ā gutt. xi. m. *With which the parts affected are to be anointed.*

Difficulty of Urine.

This affection is marked by pain in the diſcharge of urine, a frequent deſire to avoid it, or with pain on the firſt attempt. The urine itſelf diſplays alſo a morbid ſtate, being either mixed with a thick mucus, or tinged with blood; or it ſhows ſmall coagula, intermixed with the diſcharge, that fall to the bottom.

The treatment conſiſts firſt in the uſe of diluents and emolients, to remove irritation, as in vol. I. p. 286.

When inflammatory ſtage paſt cure, to be completed as in chronic nephritis, ditto.

When the diſeaſe is recurrent, the virga aurea is ſpecific.

Suppreſſion of Urine.

Suppreſſion of urine, from impeded ſecretion, is known to occur, though a rare diſeaſe, in infancy; and the want of accumulation, or pain in the lower part of the belly, marks it from this cauſe.

To be treated by obviating inflammation by leeches to the abdomen.

Bliſters to the ſacrum, the warm bath, and the occaſional uſe of laxatives and diuretics, vol. I. p. 332, proper.

Calculus.

The ſtone is a diſeaſe particularly common to infancy, more ſo even than to adults. In the form of gravel, the ſymptoms are generally ſlight, and yield to ſome gentle emollient laxative, to dilution, or ſome mild alkali.

Symptoms of irritation from ſtone to be alleviated by dilution, ſome emollient laxative as in vol. I. p. 286, and the uſe of a mild alkali, as in p. 240.

Occaſional fits of pain will yield to the warm bath and an opiate. *Vide* vol. I. p. 305.

Incontinence of Urine.

This is ſeldom, in infancy, a primary diſeaſe, but a conſequence of ſome other, as an affection of the bladder or ſpine. It is at times attended with violent gonorrhœa.

Acute ſpecies treated by bliſters to the ſacrum, tincture of cantharides in ſome ſoft emulſion, or aſtringents.

Exceſſive Thirſt

Is attended with a diſcharge of urine equal to the exceſs of fluid drank; and the urine is of the ſame pale watery appearance as when the fluid is received.

The treatment uncertain. The uſe of tonics has been propoſed, and opening the ſecretions of the ſkin or kidneys.

Inflamed Eyes.

Children, at birth, are very ſubject to ophthalmia, which varies in its degree, obſtinacy, and extent. From the appearance of the diſcharge, three ſpecies of it are noticed, viz. the bloodſhot, watery, and purulent.

The firſt is treated by an aſtringent waſh, as in vol. II. p. 413, and an additional covering to the head.

The ſecond by the common means of obviating inflammation, and the uſe of collyria, as in vol. I. p. 280. And

The third by the ſame means employed in the moſt active manner from the higher inflammation preſent.

Film, or Speck.

This diſeaſe has been treated at large elſewhere (vol. II. p. 189). In children, as in adults, it is moſt frequent in a ſcrofulous conſtitution; and ariſes as a conſequence of effuſion during the progreſs of inflammation.

To be treated by ſtimulants cautiouſly employed, as the aqua cupri ammon. the corroſive ſolution, or nitrated ointment.

Cataract.

Cataract and gutta ſerena are not infant diſeaſes; they may, however, occur, under peculiar circumſtances, as congenite diſorders, and their conſideration is therefore neceſſary here.

The treatment depends chiefly, at this period, on ſtimulating applications, as the uſe of a bruſh, or exciting inflammation by diluted æther, the corroſive ſolution, diluted oil of amber, ſteams of turpentine, &c.

Stye.

To be treated, when ſuppuration takes place, by touching its baſe with cauſtic, or applying a ligature.

Deafneſs.

Deafneſs from cold yields to additional warmth to the part, and the uſe of laxatives.

Deafneſs from induration removed by ſyringing the ears; uſing afterwards emollients, as in vol. II. p. 440; or ſtimulants, as,

℞ Ol. Amygdal. ℥ſſ.
Ol. Succin. rectificat. gutt. xx.
Spt. Camphorat. ℥ſſ.
Tinct. Caſtor. ℥i. m.

Four or ſix drops to be dropped into the ear warm, morning and evening.

Deafneſs from dryneſs of ear removed either by an artificial ſupply, as the uſe of ſoap liniment or oil of almonds and æther, or by reſtoring the natural ſupply by onion juice inſerted into the ear, by a clove of garlic, and covering it by adheſive plaſter from the air; or by a bliſter behind the ear, or by electricity.

Canker.

Canker of the mouth conſiſts in ſmall ſores affecting the mouth, or the inſide of the lips, or the gums. It occurs at three periods:

To be treated by blisters and caustics to the sacrum, by stimulant applications to the legs and thighs, as in vol. I. p. 289; and by the use of irons, to give support till the strength of the is restored.

Debility, with Discolouration.

This differs from the former in being, apparently, a general affection of the system. The children become weakly, and drag their legs after them; the head enlarges, the limbs become emaciated, and over the whole there appears a deep leaden blue colour.

To be treated by cordials and tonics internally, and externally by warm sea-bathing, friction, and stimulants.

Curvature of Bones, with Injury.

To be treated as in vol. II. p. 452.

Whitlow.

To be treated as in vol. II. p. 432; also,

℞ Ungt. Altheæ, ℥ij.
Spt. Vin. Camphorat. ʒij.
Opii, gr. vi. m. ft. Liniment.

℞ Camphoræ, ʒi.
Ol. Palinæ, ℥viij. m. ft. Linimen.

Boil.

To be treated as phlegmon, vol. II. p. 436.

Chilblains.

To be treated as in vol. II. p. 433; also,

℞ Ol. Palmæ, ʒi.
Macis, ʒss.
Camphoræ, ʒij. m. ft. Liniment. *To be used night and morning.*

Burns.

To be treated as in vol. II. p. 420.

External Injuries of Bones.

Theſe conſiſt of luxations and fractures; and the rules for their treatment are the ſame as in the adult, detailed in vol. II. pp. 450 and 451.

Morbid Adheſion of Tongue.

To be treated by the operation.

Swallowing of tongue to be attended to; and, on reſtoring it to its place, the hæmorrhage, if conſiderable, to be ſtopped by Petit's inſtrument.

Hiccough

Forms a mild ſpecies of convulſion, to which infancy and childhood are much ſubjected.

In infancy, to be treated by correcting predominant acidity, and by abſorbents, as in p. 226.

In childhood, by counteracting irritability, by the uſe of vinegar or the citric acid, or any powerful ſtimulus, ſuſpending the feeling for a time.

Bleeding at the Noſe.

To be treated as in vol. I. p. 294.

Affections of Navel.

Hæmorrhage.

Bleeding, or a rawneſs, is apt to ariſe on the ſeparation of the cord. It is the effect of a ſoft fungus, preventing the ſkin ſtretching, as uſual, over the mouths of the veſſels.

To be treated by compreſſion, with lint ſecured by ſticking, plaſter, or a bandage; and, if neceſſary, the uſe of external ſtyptics conjoined.

Ulceration.

To be treated by a ſinged rag, the application of abſorbents, a cabbage-leaf or toaſted raiſin, or, failing theſe, a gentle uſe of cauſtic.

Where more extenſive, and of a gangrenous nature, to be treated by antiſeptics, as in p. 229.

Imperfect Separation of Cord.

To be treated by the application of a new ligature, ſo as to enable it completely to ſhrink,

Swelling of Prepuce.

Yields to fomentations and ſcarification.

Falling-down of Gut.

To be treated by aſtringent lotions, after reducing it; and even injections of the ſame nature into the anus.

Where much inflammation, a ſaturnine injection, with laudanum, firſt made, before attempting the reduction.

Diſcharge from the Vagina.

The nature of theſe diſcharges, preceding puberty, is various, being either bloody, mucous, or purulent.

To be treated by ſaturnine lotion, as in vol. II. p. 413; and, where obſtinate, by a ſlight uſe of mercury, in the form of the corroſive ſublimate, or the bark, and ſome of the balſams, as in vol. I. p. 286.

Contaminated Wounds.

To be treated as in vol. II. p. 421.

Congenite Diſeaſes.

Deranged Circulation.

The ſymptoms of this affection are, a diſcolouration of the face and neck, with a dark blue or leaden colour of the lips. The period of their appearance is ſoon after birth; and they continue to increaſe, attended with difficult reſpiration on motion; neither are the ſymptoms relieved by any means employed but confinement to one poſture.

Nothing, in the way of treatment, can be attempted.

Deficiency of Cranium.

Hernia of the Brain.

It is chiefly by want of fluctuation, by the effect of preſſure, and by its pulſation, that it is diſtinguiſhed from other tumors in this ſituation.

To be treated by a gradual compreſſion, made by a thin piece of lead appended to the child's cap.

External Tumors.

The partial kind is one conſpicuous at birth, on the cranium, reſembling in ſize an egg, and of a round form, with the ſkin diſcoloured.

Treatment, the uſe of aſtringents; as, fomentations of red vine or diluted brandy; compreſſion, by means of a piece of thin lead; puncture, where the contents are daily augmenting.

The general ſpecies of external tumor yields to time and the uſe of warm aſtringent embrocations; as, a ſolution of vinegar, ſal-ammoniac, or camphorated ſpirits.

Spina Biſida

Admits of no cure; even preſſure is hardly admiſſible.

Parenchymatous Tumors.

Yield to aſtringents, to preſſure, or extirpation.

Hernias.

The umbilical treated by compreſſion, by means of ſticking-plaſter, or a bandage.

The inguinal generally yields to cold bathing; and, when more advanced, to a truſs.

Hydrocele

Yields readily to the uſe of external aſtringents.

Imperfection of Parts.

Imperforation of Vagina.

To be treated as in vol. IV. p. 13.

Of Anus.

To be treated as in Surgery.

Of Penis.

To be treated as in Surgery.

Of Lips.

To be treated as in vol. II. p. 218.

Of Ears.

To be treated as in vol. II. p. 217.

Of Eyes.

To be treated, where the defect conſiſts in ſquinting, by drawing the diſtorted eye in a right direction, by directing its action that way.

Of Feet.

To be treated as in vol. II. p. 235.

Orpinal Marks.

To be treated, where capable of relief, as deſcribed in vol. II. p. 207.

MANCHESTER

A VIEW OF NOSOLOGY;

OR,

THE ARRANGEMENT AND CLASSIFICATION OF *DISEASES:*

EXHIBITING

THE SYSTEMS OF DIFFERENT AUTHORS,

To the present Time;

AND CONNECTING THE MOST APPROVED,

VIZ.

THE LATE DR. CULLEN'S,

WITH THE PRECEDING VOLUMES.

MANCHESTER MEDICAL SOCIETY

NOSOLOGY.

I. WE have now considered the practice of medicine and surgery in their full extent; but, to render the view complete, it may be still necessary to connect the account of the diseases exhibited in this and the preceding volumes with a system of Nosology; a subject so essentially necessary for every practitioner, in order to excel in the discrimination of disease.

II. Nosology is properly that study or science, which, embracing solely the pathognomonics, or distinguishing symptoms of disease, ascertains, by this means, their nature and character.

III. Every disease, as it appears in nature, forms a distinct species, or has a greater or lesser set of sym-

ptoms entirely peculiar to itſelf; and a certain number, alſo, in which it agrees with ſome other diſeaſes. Hence ariſes a diſtinction in the ſymptoms of diſeaſe. By the latter its relation is eſtabliſhed to other diſeaſes; and, by the former, its morbid appearances, or phæ-nomena, are confined to itſelf. It is this diſtinction, therefore, which, in the progreſs of the ſtudy of Noſology, has cauſed genera to be formed out of the ſpecies, or out of diſeaſes, as they naturally appear.

IV. In forming genera, however, much accuracy of obſervation is neceſſary, ſo as not to curtail the ſpecies too much, on the one hand, or load the memory by imperfect obſervation on the other. Hence, in the ſpecies, no diſtinction ſhould be made where the train of ſymptoms varies only in degree, or is modified ſomewhat by ſtate of conſtitution, or ſome ſlight variation in the action of the ſame cauſe.

V. Two circumſtances particularly evince the relation of diſeaſes to each other.

The firſt is, the ſimilitude of their cauſe, which always infers a ſimilitude of action. This is ſtrongly apparent in all contagious diſeaſes.

The ſecond circumſtance is, the accordance in the

ſucceſs of their treatment; for diſeaſes, cured by the ſame means, infallibly partake of the ſame nature. †.

VI. In marking the characters of diſeaſes, or forming Noſology, the rules to be eſtabliſhed are:

1. To ſelect thoſe external marks only which are obvious to the ſenſes, rejecting all conjecture beyond this obvious appearance, or laying aſide any conſideration of the internal ſtate; and theſe obvious marks are what ſtrike the phyſician more than what regulate, or are drawn from, the feelings of the patient.

2. That theſe obvious, or external marks, be the conſtant attendants of the diſeaſe, either on its firſt attack or its progreſs. The cauſe, therefore, of the diſeaſe, where apparent, is not to be rejected, nor the progreſſive ſucceſſion of its phænomena.

3. That no more of theſe external marks, or ſymptoms, be taken, than what are ſufficient to characteriſe the diſeaſe. And,

4. That the ſtate or defect of the functions be noted, as affording a leading concluſion to the character of many diſeaſes.

VII. Having eſtabliſhed the proper mode of defining diſeaſes by theſe rules, this definition ſhould be expreſſed in the moſt common, or generally-adopted

† Syphilis & obstructed liver are both cured by Mercury — in what respect do these two diseases partake of a common nature? —

terms; and where any alteration in this reſpect is employed, ſynonymes, as explanatory of it, ſhould always be joined.

VIII. With theſe obſervations on the principles of Noſology in view, we ſhall now exhibit an abſtract of the leading ſyſtems of it that have appeared, finiſhing with that of Dr. Cullen, as beſt ſuited to the purpoſes of the practical phyſician.

SYNOPTICAL VIEW

OF THE

SYSTEM OF SAUVAGES.

THE firſt Syſtem of Noſology that appeared was that of the celebrated Sauvages in 1732: previous to his time, the hint of ſuch a work had been ſtrongly thrown out by Sydenham and Baglivi; and, even before this, ſome rude attempt had been made towards it by Plater.

The Syſtem of Sauvages is arranged into ten claſſes; theſe claſſes are divided into different orders; and theſe orders into different genera, compoſed of their ſeveral ſpecies—thus:

CLASS I. VITIA.

ORDER I. *MACULÆ.*

Genus 1. Leucoma.
2. Vitiligo.
3. Ephelis.
4. Gutta roſea.
5. Nævus.
6. Ecchymoma.

ORD. II. *EFFLORESCENTIÆ.*

7. Herpes.
8. Epinyctis.
9. Pſydracia.
10. Hidroa.

ORD. III. *PHYMATA.*

11. Erythema.
12. Œdema.
13. Emphyſema.
14. Schirrus.
15. Phlegmone.
16. Bubo.
17. Parotis.
18. Furunculus.
19. Anthrax.
20. Cancer.
21. Paronychia.
22. Phimoſis.

ORD. IV. *EXCRESCENTIÆ.*

23. Sarcoma.
24. Condyloma.
25. Verruca.
26. Pterygium.
27. Hordeolum.
28. Bronchocele.
29. Exoſtoſis.
30. Gibboſitas.
31. Lordoſis.

ORD. V. *CYSTIDES.*

32. Aneuryſma.
33. Varix.
34. Hydatis.
35. Mariſca.
36. Staphyloma.
37. Lupia.
38. Hydarthrus.
39. Apoſtema.
40. Exomphalus.
41. Oſcheocele.

ORD. VI. *ECTOPIÆ.*

42. Exophthalmia.
43. Blepharoptoſis.
44. Hypoſtophyle.
45. Paragloſſa.
46. Proptoma.
47. Exania.
48. Exocyſte.
49. Hyſteroptoſis.
50. Enterocele.
51. Epiplocele.
52. Gaſterocele.
53. Hepatocele.
54. Splenocele.
55. Hyſterocele.
56. Cyſtocele.
57. Encephalocele.
58. Hyſteroloxia.
59. Parorchydium.
60. Exarthrema.
61. Diaſtaſis.
62. Laxarthrus.

ORD. VII. *PLAGÆ.*

63. Vulnus.
64. Punctura.
65. Excoriatio.
66. Contuſio.
67. Fractura.
68. Fiſſura.
69. Ruptura.
70. Amputatura.
71. Ulcus.
72. Exulceratio.
73. Sinus.
74. Fiſtula.
75. Rhagas.
76. Eſchara.
77. Caries.
78. Arthrocace.

Class II. FEBRES.

Ord. I. *CONTINUÆ.*

79. Ephemera.
80. Synocha.
81. Synochus.
82. Typhus.
83. Hectica.

Ord. II. *REMITTENTES.*

84. Amphimerina.
85. Tritæophya.
86. Tetartophya.

Ord. III. *INTERMITTENTES.*

87. Quotidiana.
88. Tertiana.
89. Quartana.
90. Erratica.

Class III. PHLEGMASIÆ.

Ord. I. *EXANTHEMATICÆ.*

91. Peſtis.
92. Variola.
93. Pemphigus.
94. Rubeola.
95. Miliaris.
96. Purpura.
97. Eryſipelas.
98. Scarlatina.
99. Eſſera.
100. Aphtha.

Ord. II. *MEMBRANACEÆ.*

101. Phrenitis.
102. Paraphreneſis.
103. Pleuritis.
104. Gaſtritis.
105. Enteritis.
106. Epiploitis.
107. Metritis.
108. Cyſtitis.

Ord. III. *PARENCHYMATOSÆ.*

109. Cephalitis.
110. Cynanche.
111. Carditis.
112. Peripneumonia.
113. Hepatitis.
114. Splenitis.
115. Nephritis.

Class IV. SPASMI.

Ord. I. *TONICI PARTIALES.*

116. Strabiſmus.
117. Triſmus.
118. Obſtipitas.
119. Contractura.
120. Crampus.
121. Priapiſmus.

ORD. II. *TONICI GENERALES.*

122. Tetanus.
123. Catochus.

ORD. III. *CLONICI PARTIALES.*

124. Nyſtagmus.
125. Carphologia.
126. Pandiculatio.
127. Apomyttoſis.
128. Convulſio.
129. Tremor.
130. Palpitatio.
131. Claudicatio.

ORD. IV. *CLONICI GENERALES.*

132. Rigor.
133. Eclampſia.
134. Epilepſia.
135. Hyſteria.
136. Sceſotyrbe.
137. Beriberia.

CLASS V. ANHELATIONES.

ORD. I. *SPASMODICÆ.*

138. Ephialtes.
139. Sternutatio.
140. Oſcedo.
141. Singultus.
142. Tuſſis.

ORD. II. *OPPRESSIVÆ.*

143. Stertor.
144. Dyſpnœa.
145. Aſthma.
146. Orthopnœa.
147. Angina.
148. Pleurodyne.
149. Rheuma.
150. Hydrothorax.
151. Empyema.

CLASS VI. DEBILITATES.

ORD. I. *DYSÆSTHESIÆ.*

152. Cataracta.
153. Caligo.
154. Amblyopia.
155. Amauroſis.
156. Anoſmia.
157. Agheuſtia.
158. Dyſecæa.
159. Paracuſis.
160. Cophoſis.
161. Anæſtheſia.

ORD. II. *ANEPITHYMIÆ.*

162. Anorexia.
163. Adipsia.
164. Anaphrodisia.

ORD. III. *DYSCINESIÆ.*

165. Mutitas.
166. Aphonia.
167. Psellismus.
168. Paraphonia.
169. Paralysis.
170. Hemiplegia.
171. Paraplexia.

ORD. IV. *LEIPOPSYCHIÆ.*

172. Asthenia.
173. Leipothymia.
174. Syncope.
175. Asphyxia.

ORD. V. *COMATA.*

176. Catalepsis.
177. Ecstasis.
178. Typhomania.
179. Lethargus.
180. Cataphora.
181. Carus.
182. Apoplexia.

CLASS VII. DOLORES.

ORD. I. *VAGI.*

183. Arthritis.
184. Ostocopus.
185. Rheumatismus.
186. Catarrhus.
187. Anxietas.
188. Lassitudo.
189. Stupor.
190. Pruritus.
191. Algor.
192. Ardor.

ORD. II. *CAPITIS.*

193. Cephalalgia.
194. Cephalæa.
195. Hemicrania.
196. Ophthalmia.
197. Otalgia.
198. Odontalgia.

ORD. III. *PECTORIS.*

199. Dysphagia.
200. Pytosis.
201. Cardiogmus.

ORD. IV. *ABDOMINALES INTERNI.*

202. Cardialgia.
203. Gastrodynia.
204. Colica.
205. Hepatalgia.
206. Splenalgia.
207. Nephralgia.
208. Dystocia.
209. Hysteralgia.

ORD. V. *EXTERNI ET ARTUUM.*

210. Mastodynia.
211. Rachialgia.
212. Lumbago.
213. Ischias.
214. Proctalgia.
215. Pudendagra.

CLASS VIII. VESANIÆ.

ORD. I. *HALLUCINATIONES.*

216. Vertigo.
217. Suffusio.
218. Diplopia.
219. Syrogmos.
220. Hypochondriasis.
221. Somnambulismus.

ORD. II. *MOROSITATES.*

222. Pica.
223. Bulimia.
224. Polydipsia.
225. Antipathis.
226. Nostalgia.
227. Panophobia.
228. Satyriasis.
229. Nymphomania.
230. Tarantismus.
231. Hydrophobia.

ORD. III. *DELIRIA.*

232. Paraphrosyne.
233. Amentia.
234. Melancholia.
235. Mania.
236. Demonomania.

ORD. IV. *VERANIÆ ANOMALÆ.*

237. Amnesia.
238. Agrypnia.

CLASS IX. FLUXUS.

Ord. I. *SANGUIFLUXUS.*

239. Hæmorrhagia.
240. Hæmoptyſis.
241. Stomacace.
242. Hæmatemeſis.
243. Hæmaturia.
244. Menorrhagia.
245. Abortus.

Ord. II. *ALVIFLUXUS.*

246. Hepatirrhœa.
247. Hæmorrhois.
248. Dyſenteria.
249. Melæna.
250. Nauſea.
251. Vomitus.
252. Ileus.
253. Cholera.
254. Diarrhœa.
255. Cœliaca.
256. Lienteria.
257. Teneſmus.

Ord. III. *SERIFLUXUS.*

258. Ephidroſis.
259. Epiphora.
260. Coryza.
261. Ptyaliſmus.
262. Anacatharſis.
263. Diabetes.
264. Enureſis.
265. Dyſuria.
266. Pyuria.
267. Leucorrhœa.
268. Gonorrhœa.
269. Dyſpermatiſmus.
270. Galactirrhœa.
271. Octorrhœa.

Ord. IV. *ÆRIFLUXUS.*

272. Flatulents.
273. Ædopſophia.
274. Dyſodia.

Class X. CACHEXIÆ.

Ord. I. *MACIES.*

275. Tabes.
276. Phthiſis.
277. Atrophia.
278. Aridura.

ORD. II. *INTUMESCENTIÆ.*

279. Polyſarcia.
280. Pneumatoſis.
281. Anaſarca.
282. Phlegmatia.
283. Phyſconia.
284. Graviditas.

ORD. III. *HYDROPES PARTIALES.*

285. Hydrocephalus.
286. Phyſocephalus.
287. Hydrorachitis.
288. Aſcites.
289. Hydrometra.
290. Phyſometra.
291. Tympanites.
292. Metroriſmus.
293. Iſchuria.

ORD. IV. *TUBERA.*

294. Rachitis.
295. Scrofula.
296. Carcinoma.
297. Leontiaſis.
298. Malis.
299. Frambœſia.

ORD. V. *IMPETIGINES.*

300. Syphilis.
301. Scorbutus.
302. Elephantiaſis.
303. Lepra.
304. Scabies.
305. Tinea.

ORD. VI. *ICTERITIÆ.*

306. Aurigo.
307. Melaſicterus.
308. Phænigmus.
309. Chloroſis.

ORD. VII. *CACHEXIÆ ANOMALÆ.*

310. Phthiriaſis.
311. Trichoma.
312. Alopecia.
313. Elcoſis.
314. Gangræna.
315. Necroſia.

SYNOPTICAL VIEW

OF THE

SYSTEM OF LINNÆUS.

NEXT to the ſyſtem of Sauvages comes that of the celebrated Linnæus, who, after a new creation of knowledge on the ſubject of Botany, applied the ſame plan of arrangement to the elucidation of the nature of diſeaſe.—His ſyſtem is divided into Eleven Claſſes, and is rather more extended than that of Sauvages, whom he however cloſely follows; but Linnæus we find not ſo happy in his arrangement of Diſeaſes as in his Syſtema Naturæ.

Class I. EXANTHEMATICA.

Ord. I. *CONTAGIOSI.*

1. Morta.
2. Peſtis.
3. Variola.
4. Rubeola.
5. Petechia.
6. Syphilis.

Ord. II. *SPORADICI.*

7. Miliaria.
8. Uredo.
9. Aphtha.

Ord. III. *SOLITARII.*

10. Eryſipelas.

CLASS II. CRITICI.

ORD. I. *CONTINENTES.*

11. Diaria.
12. Synocha.
13. Synochus.
14. Lenta.

ORD. II. *INTERMITTENTES.*

15. Quotidiana.
16. Tertiana.
17. Quartana.
18. Duplicana.
19. Errana.

ORD. III. *EXACERBANTES.*

20. Amphimerina.
21. Tritæus.
22. Tetartophia.
23. Hemitritæa.
24. Hectica.

CLASS III. PHLOGISTICI.

ORD. I. *MEMBRANACEI.*

25. Phrenitis.
26. Paraphrenesis.
27. Pleuritis.
28. Gastritis.
29. Enteritis.
30. Proctitis.
31. Cystitis.

ORD. II. *PARENCHYMATICI.*

32. Sphacelismus.
33. Cynanche.
34. Peripneumonia.
35. Hepatitis.
36. Splenitis.
37. Nephritis.
38. Hysteritis.

ORD. III. *MUCSULOSI.*

39. Phlegmone.

Class IV. DOLOROSI.

Ord. I. *INTRINSECI.*

40. Cephalalgia.
41. Hemicrania.
42. Gravedo.
43. Ophthalmia.
44. Otalgia.
45. Odontalgia.
46. Angina.
47. Soda.
48. Cardialgia.
49. Gaſtrica.
50. Colica.
51. Hepatica.
52. Splenica.
53. Pleuritica.
54. Pneumonica.
55. Hyſteralgia.
56. Nephritica.
57. Dyſuria.
58. Pudendagra.
59. Proctica.

Ord. II. *EXTRINSECI.*

60. Arthritis.
61. Oſtocopus.
62. Rheumatiſmus.
63. Volatica.
64. Pruritus.

Class V. MENTALES.

Ord. I. *IDEALES.*

65. Delirium.
66. Paraphroſyne.
67. Amentia.
68. Mania.
69. Dæmonia.
70. Veſania.
71. Melancholia.

Ord. II. *IMAGINARII.*

72. Syringmos.
73. Phantaſmus.
74. Vertigo.
75. Panophobia.
76. Hypochondriaſis.
77. Somnambuliſmus.

ORD. III. *PATHETICI.*

78. Citta.
79. Bulimia.
80. Polydipſia.
81. Satyriaſis.
82. Erotomania.
83. Noſtalgia.
84. Tarantiſmus.
85. Rabies.
86. Hydrophobia.
87. Cacoſitia.
88. Antipathia.
89. Anxietas.

CLASS VI. QUIETALES.

ORD. I. *DEFECTIVI.*

90. Laſſitudo.
91. Languor.
92. Aſthenia.
93. Lipothymia.
94. Syncope.
95. Aſphyxia.

ORD. II. *SOPOROSI.*

96. Somnolentia.
97. Typhomania.
98. Lethargus.
99. Cataphora.
100. Carus.
101. Apoplexia.
102. Paraplegia.
103. Hemiplegia.
104. Paralyſis.
105. Stupor.

ORD. III. *PRIVATIVI.*

106. Moroſis.
107. Oblivio.
108. Amblyopia.
109. Cataracta.
110. Amauroſis.
111. Scotomia.
112. Cophoſis.
113. Anoſmia.
114. Ageuſtia.
115. Aphonia.
116. Anorexia.
117. Adipſia.
118. Anæſtheſia.
119. Atecnia.
120. Atonia.

Class VII. MOTORII.

Ord. I. *SPASTICI.*

121. Spaſmus.
122. Priapiſmus.
123. Borborygmos.
124. Triſmos.
125. Sardiaſis.
126. Hyſteria.
127. Tetanus.
128. Catochus.
129. Catalepſis.
130. Agrypnia.

Ord. II. *AGITATORII.*

131. Tremor.
132. Palpitatio.
133. Orgaſmus.
134. Subſultus.
135. Carpologia.
136. Stridor.
137. Hippos.
138. Pſelliſmus.
139. Chorea.
140. Beriberi.
141. Rigor.
142. Convulſio.
143. Epilepſia.
144. Hieranoſos.
145. Raphania.

Class VIII. SUPPRESSORII.

Ord. I. *SUFFOCATORII.*

146. Raucedo.
147. Vociferatio.
148. Riſus.
149. Fletus.
150. Suſpirium.
151. Oſcitatio.
152. Pandiculatio.
153. Singultus.
154. Sternutatio.
155. Tuſſis.
156. Stertor.
157. Anhelatio.
158. Suffocatio.
159. Empyema.
160. Dyſpnœa.
161. Aſthma.
162. Orthopnœa.
163. Ephialtes.

ORD. II. *CONSTRICTORII.*

164. Aglutitio.
165. Flatulentia.
166. Obſtipatio.
167. Iſchuria.
168. Dyſmenorrhœa.
169. Dyſlochia.
170. Aglactatio.
171. Sterilitas.

CLASS IX. EVACUTORII.

ORD. I. *CAPITIS.*

172. Otorrhœa.
173. Epiphora.
174. Hæmorrhagia.
175. Coryza.
176. Stomacace.
177. Ptyaliſmus.

ORD. II. *THORACIS.*

178. Screatus.
179. Expectoratio.
180. Hæmoptyſis.
181. Vomica.

ORD. III. *ABDOMINIS.*

182. Ructus.
183. Nauſea.
184. Vomitus.
185. Hæmatemeſis.
186. Iliaca.
187. Cholera.
188. Diarrhœa.
189. Lienteria.
190. Cœliaca.
191. Cholirica.
192. Dyſenteria.
193. Hæmorrhois.
194. Teneſmus.
195. Crepitus.

ORD. IV. *GENITALIUM.*

196. Enureſis.
197. Stranguria.
198. Diabetes.
199. Hæmaturia.
200. Glus.
201. Gonorrhœa.
202. Leucorrhœa.
203. Menorrhagia.
204. Parturitio.
205. Abortus.
206. Mola.

ORD. V. *CORPORIS EXTERNI.*

207. Galactia.
208. Sudor.

Class X. DEFORMES.

Ord. I. *EMACIANTES.*

209. Phthiſis.
210. Tabes.
211. Atrophia.
212. Maraſmus.
213. Rachitis.

Ord. II. *TUMIDOSI.*

214. Polyſarcia.
215. Leucophlegmatia.
216. Anaſarca.
217. Hydrocephalus.
218. Aſcites.
219. Hypoſarca.
220. Tympanites.
221. Graviditas.

Ord. III. *DECOLORES.*

222. Cachexia.
223. Chloroſis.
224. Scorbutus.
225. Icterus.
226. Plethora.

Class XI. VITIA.

Ord. I. *HUMORALIA.*

227. Aridura.
228. Digitium.
229. Emphyſema.
230. Œdema.
231. Sugillatio.
232. Inflammatio.
233. Abſceſſus.
234. Gangrena.
235. Sphacelus.

Ord. II. *DIALYTICA.*

236. Fractura.
237 Luxatura.
238. Ruptura.
239. Contuſura.
240. Profuſio.
241. Vulnus.
242. Amputatura.
243. Laceratura.
244. Punctura.
245. Morſura.
246. Combuſtura.
247. Excoriatura.
248. Intertrigo.
249. Rhagas.

ORD. III. *EXULCERATIONES.*

250. Ulcus.
251. Cacoëthes.
252. Noma.
253. Carcinoma.
254. Ozena.
255. Fiſtula.
256. Caries.
257. Arthrocace.
258. Cocyta.
259. Paronychia.
260. Pernio.
261. Preſſura.
262. Arctura.

ORD. IV. *SCABIES.*

263. Lepra.
264. Tinea.
265. Achor.
266. Pſora.
267. Lippitudo.
268. Serpigo.
269 Herpes.
270. Varus.
271. Bacchia.
272. Bubo.
273. Anthrax.
274. Phlyctenæ.
275. Puſtula.
276. Papula.
277. Hordeolum.
278. Verruca.
279. Clavus.
280. Myrmecium.
281. Eſchara.

ORD. V. *TUMORES PROTUBERANTES.*

282. Aneuriſma.
283. Varix.
284. Schirrus.
285. Struma.
286. Atheroma.
287. Anchyloſis.
288. Ganglion.
289. Natta.
290. Spinola.
291. Exoſtoſis.

ORD. VI. *PROCIDENTIÆ.*

292. Hernia.
293. Prolapſus.
294. Condyloma.
295. Sarcoma.
296. Pterygium.
297. Ectropium.
298. Phimoſis.
299. Clitoriſmus.

ORD. VII. *DEFORMATIONES.*

300. Contractura.
301. Gibber.
302. Lordoſis.
303. Diſtortio.
304. Tortura.
305. Strabiſmus.
306. Lagophthalmia.
307. Nyctalopia.

308. Preſbytia.
309. Myopia.
310. Labarium.
311. Lagoſtoma.
312. Apella.
313. Atreta.
314. Plica.
315. Hirſuties.
316. Alopecia.
317. Trichiaſis.

ORD. VIII. *MACULÆ.*

311. Cicatrix.
319. Nævus.
320. Morphæa.
321. Vibex.
322. Sudamen.
323. Melaſma.
324. Hepatizon.
325. Lentigo.
326. Ephelis.

SYNOPTICAL VIEW

OF THE

SYSTEM OF VOGEL.

AFTER the ſyſtem of Linnæus comes to be noticed that of Vogel, profeſſor at Göttingen. It comprehends, like that of Linnæus, no leſs than eleven claſſes.

Class I. FEBRES.

Ord. I. *INTERMITTENTES.*

1 Quotidiana
2 Tertiana
3 Quartana
4 Quintana
5 Sextana
6 Septana
7 Octana
8 Nonana
9 Decimana
10 Vaga
11 Menſtrua
12 Terriana duplex
13 Quartana duplex
14 Quartana triplex.

Ord. II. *CONTINUÆ.*

§ 1. SIMPLICES.

15 Quotidiana
16 Synochus
17 Amatoria
18 Phrenitis
19 Epiala
20 Cauſos
21 Elodes
22 Lethargus
23 Typhomania
24 Leipyria
25 Phricodes
26 Lyngodes
27 Aſſodes
28 Cholerica
29 Syncopalis
30 Hydrophobia
31 Oſcitans
32 Ictericodes
33 Peſtilentialis
34 Siriaſis

§ 2. COMPOSITÆ.

¶ 1. *Exanthematicæ.*

35 Variolosa
36 Morbillosa
37 Miliaris
38 Petechialis
39 Scarlatina
40 Urtica
41 Bullosa
42 Varicella
43 Pemphigodes
44 Aphthosa.

¶ 2. *Inflammatoriæ.*

45 Phrenismus
46 Chemosis
47 Ophthalmites
48 Otites
49 Angina
50 Pleuritis
51 Peripneumonia
52 Mediastina
53 Pericarditis
54 Carditis
55 Paraphrenitis
56 Gastritis
57 Enteritis
58 Hepatitis
59 Splenitis
60 Mesenteritis
61 Omentitis
62 Peritonitis
63 Myocolitis
64 Pancreatica
65 Nephritis
66 Cystitis
67 Hysteritis
68 Erysipelacea
69 Podagrica
70 Panaritia
71 Cyssotis.

¶ 3. *Symptomaticæ.*

72 Apoplectica
73 Catarrhalis
74 Rheumatica
75 Hæmorrhoidalis
76 Lactea
77 Vulneraria
78 Suppuratoria
79 Lenta
80 Hectica.

Class II. PROFLUVIA.

Ord. I. *HÆMORRHAGIÆ.*

81 Hæmorrhagia
82 Epiſtaxis
83 Hæmoptoë
84 Hæmoptyſis
85 Stomacace
86 Odontirrhœa
87 Otorrhœa
88 Ophthalmorhagia
89 Hæmatemeſis
90 Hepatirrhœa
91 Catarrhexis
92 Hæmaturia
93 Cyſtirrhagia
94 Stymatoſis
95 Hæmatopedeſis
96 Menorrhagia
97 Abortio.

Ord. II. *APOCENOSES.*

98 Catarrhus
99 Epiphora
100 Coryza
101 Otopuoſis
102 Otoplatos
103 Ptyaliſmus
104 Vomica
105 Diarrhœa
106 Puorrhœa
107 Dyſenteria
108 Lienteria
109 Cœliaca
110 Cholera
111 Pituitaria
112 Leucorrhois
113 Eneureſis
114 Diureſis
115 Diabetes
116 Puoturia
117 Chylaria
118 Gonorrhœa
119 Leucorrhœa
120 Exoneiroſis
121 Hydropedeſis
122 Galactia
123 Hypercatharſis
124 Ecphyſe
125 Dyſodia.

Class III. EPISCHESES.

126 Gravedo
127 Flatulentia
128 Oſtipatio
129 Iſchuria
130 Amenorrhœa
131 Dyſlochia
132 Deuteria
133 Agalaxis.

Class IV. DOLORES.

134 Anxietas
135 Bleſtriſmus
136 Pruritus
137 Catapſyxis
138 Rheumatiſmus
139 Arthritis
140 Cephalalgia
141 Cephalæa
142 Clavus
143 Hemicrania
144 Carebaria
145 Odontalgia
146 Hæmodia
147 Odaxiſmus
148 Otalgia
149 Acatapoſis
150 Cionis
151 Himantoſis
152 Cardiogmus
153 Maſtodynia
154 Soda
155 Periadynia
156 Pneumatoſis
157 Cardialgia
158 Encauſis
159 Nauſea
160 Colica
161 Eilema
162 Ileus
163 Stranguria
164 Dyſuria
165 Lithiaſis
166 Teneſmus
167 Cluneſia
168 Cedma
169 Hyſteralgia
170 Dyſmenorrhœa
171 Dyſtocia
172 Atocia
173 Priapiſmus
174 Pſoriaſis
175 Podagra
176 Oſteocopus
177 Pſophos
178 Volatica
179 Epiphlogiſma.

Class V. SPASMI.

180 Tetanus
181 Opiſthotonus
182 Epiſthotonus
183 Catochus
184 Tremor
185 Frigus
186 Horror
187 Rigor
188 Epilepſia
189 Eclampſia
190 Hieranoſos
191 Convulſio
192 Raphania
193 Chorea

194 Crampus
195 Scelotyrbe
196 Angone
197 Gloſſocele
198 Gloſſocoma
199 Hippos
200 Illoſis
201 Cincleſis
202 Cataclaſis
203 Cilloſis
204 Sternutatio
205 Tuſſis
206 Clamor
207 Triſmus
208 Capiſtrum
209 Sardiaſis
210 Gelaſmus
211 Incubus
212 Singultus
213 Palpitatio
214 Vomitus
215 Ructus
216 Ruminatio
217 Œſophagiſmus
218 Hypochondriaſis
219 Hyſteria
220 Phlogoſis
221 Digitium.

Class VI. ADYNAMIÆ.

222 Laſſitudo
223 Aſthenia
224 Torpor
225 Adynamia
226 Paralyſis
227 Paraplegia
228 Hemiplegia
229 Apoplexia
230 Catalepſis
231 Carus
232 Coma
233 Somnolentia
234 Hypophaſis
235 Ptoſis
236 Amblyopia
237 Mydriaſis
238 Amauroſis
239 Cataracta
240 Synizezis
241 Glaucoma
242 Achlys
243 Nyctalopia
244 Hemeralopia
245 Hemalopia
246 Dyſicoia
247 Surditas
248 Anoſmia
249 Apogeuſis
250 Aſaphia
251 Clangor
252 Raucitas
253 Aphonia
254 Leptophonia
255 Oxyphonia
256 Rhenophonia
257 Mutitas
258 Traulotis
259 Pſellotis
260 Iſchnophonia
261 Battariſmus

262 Suſpirium
263 Oſcitatio
264 Pandiculatio
265 Apnœa
266 Macropnœa
267 Dyſpnœa
268 Aſthma
269 Orthopnœa
270 Pnigma
271 Renchus
272 Rhochmos
273 Lipothymia
274 Syncope
275 Aſphyxia
276 Apepſia
277 Dyſpepſia
278 Diaphthora
279 Anorexia
280 Anatrope
281 Adipſia
282 Acyliſis
283 Agenetſia
284 Anodynia.

Class VII. HYPERÆSTHESES.

285 Antipathia
286 Agrypnia
287 Phantaſma
288 Caligo
289 Hæmolopia
290 Marmaryge
291 Dyſopia
292 Suſurrus
293 Vertigo
294 Apogeuſia
295 Polydipſia
296 Bulimus
297 Adephagia
298 Cynorexia
299 Allotriophagia
300 Malacia
301 Pica
302 Bombus
303 Celſa.

Class VIII. CACHEXIÆ.

304 Cachexia
305 Chloroſis
306 Icterus
307 Melanchlorus
308 Atrophia
309 Tabes
310 Phthiſis
311 Hydrothorax
312 Rachitis
313 Anaſarca
314 Aſcites
315 Hydrocyſtis
316 Tympanites
317 Hyſterophyſe

318 Scorbutus
319 Syphilis
320 Lepra
321 Elephantiaſis
322 Elephantia
323 Plica
324 Phthiriaſis
325 Phyſconia
326 Paracyiſis
327 Gangræna
328 Sphacelus.

Class IX. PARANOIÆ.

329 Athymia
330 Delirium
331 Mania
332 Melancholia
333 Ecſtaſis
334 Ecplexis
335 Enthuſiaſmus
336 Stupiditas
337 Amentia
338 Oblivio
339 Somnium
340 Hypnobataſis.

Class X. VITIA.

Ord. I. *INFLAMMATIONES.*

341 Ophthalmia
342 Blepharotis
343 Eryſipelas
344 Hieropyr
345 Paronychia
346 Onychia
347 Encauſis
348 Phimoſis
349 Paraphimoſis
350 Pernio.

Ord. II. *TUMORES.*

351 Phlegmone
352 Furunculus
353 Anthrax
354 Abſceſſus
355 Onyx
356 Hippopyon
357 Phygethlon
358 Empyema
359 Phyma
360 Ecthymata
361 Urticaria
362 Parulis
363 Epulis
364 Anchylops
365 Paragloſſa
366 Chilon
367 Scrofula
368 Bubon
369 Bronchocele
370 Parotis

371 Gongrona
372 Sparganoſis
373 Coilima
374 Scirrhus
375 Cancer
376 Sarcoma
377 Polypus
378 Condyloma
379 Ganglion
380 Ranula
381 Terminthus
382 Œdema
383 Encephalocele
384 Hydrocephalum
385 Hydrophthalmia
386 Spina bifida
387 Hydromphalus
388 Hydrocele
389 Hydrops Scroti
390 Steatites
391 Pneumatoſis
392 Emphyſema
393 Hyſteroptoſis
394 Cyſtoptoſis
395 Archoptoma
396 Bubonocele
397 Oſcheocele
398 Omphalocele
399 Merocele
400 Enterocele ovularis
401 Iſchiatocele
402 Elytrocele
403 Hypogaſtrocele
404 Cyſtocele
405 Cyrtoma
406 Hydrenterocele
407 Varix
408 Aneuriſma
409 Cirſocele
410 Gaſtrocele
411 Hepatocele
412 Splenocele
413 Hyſterocele
414 Hygrocirſocele
415 Sarcocele
416 Phyſcocele
417 Exoſtoſes
418 Hyperoſtoſis
419 Pædarthrocace
420 Encyſtis
421 Staphyloma
422 Staphyloſis
423 Fungus
424 Tofus
425 Flemen.

ORD. III. *EXTUBERANTIÆ.*

426 Verruca
427 Porrus
428 Clavus
429 Callus
430 Enchantis
431 Piadarotis
432 Pinnula
433 Pterygium
434 Hordeolum
435 Grando
436 Varus
437 Gutta roſacea
438 Ephelis
439 Eſoche
440 Exoche.

ORD. IV. *PUSTULÆ & PAPULÆ.*

441 Epinyctis
442 Phlyctæna
443 Herpes
444 Scabies
445 Aquula
446 Hydroa
447 Variola
448 Varicella
449 Purpura
450 Encauma.

ORD. V. *MACULÆ.*

451 Ecchymoma
452 Petechiæ
453 Morbilli
454 Scarlatæ
455 Lentigo
456 Urticaria
457 Stigma
458 Vibex
459 Vitiligo
460 Leuce
461 Cyasma
462 Lichen
463 Selina
464 Nebula.

ORD. VI. *DISSOLUTIONES.*

465 Vulnus
466 Ruptura
467 Rhagas
468 Fractura
469 Fissura
470 Plicatio
471 Thlasis
472 Luxatio
473 Subluxatio
474 Diachalasis
475 Attritis
476 Porrigo
477 Apozyrma
478 Anapleusis
479 Spasma
480 Contusio
481 Diabrosis
482 Agomphiasis
483 Eschara
484 Piptonychia
485 Cacoëthes
486 Therioma
487 Carcinoma
488 Phagedæna
489 Noma
490 Sycosis
491 Fistula
492 Sinus
493 Caries
494 Achores
495 Crusta lactea
496 Favus
497 Tinea
498 Argemon
499 Ægilops
500 Ozæna
501 Aphthæ
502 Intertrigo
503 Rhacosis.

ORD. VII. *CONCRETIONES.*

504 Ancyloblepharon
505 Zynizesis
506 Dacrymoma
507 Ancylogloſſum
508 Ancyloſis
509 Cicatrix
510 Dactylion.

CLASS XI. DEFORMITATES.

511 Phoxos
512 Gibber
513 Caput obſtipum
514 Strabiſmus
515 Myopiaſis
516 Lagophthalmus
517 Trichiaſis
518 Ectropium
519 Entropium
520 Rhœas
521 Rhyſſemata
522 Lagocheilos
523 Melachoſteon
524 Hirſuties
525 Canities
526 Diſtrix
527 Xiraſia
528 Phalacrotis
529 Alopecia
530 Madaroſis
531 Ptiloſis
532 Rodatio
533 Phalangoſis
534 Coloboma
525 Cerçoſis
536 Choloſis
537 Grypoſis
538 Nævus
539 Monſtroſitas
540 Polyſarcia
541 Iſchnotis
542 Rhicnoſis
543 Varus
544 Valgus
545 Leiopodes
546 Apella
547 Hypoſpadiæos
548 Urorhœas
549 Atreta
550 Saniodes
551 Cripſorchis
552 Hermaphroditis
553 Dionyſiſcus
554 Artetiſcus
555 Nefrendis
556 Spanopogon
557 Hyperatetiſcus
558 Galiancon
559 Galbulus
560 Mola.

SYNOPTICAL VIEW

OF THE

SYSTEM OF SAGAR.

AFTER that of Vogel, a ſyſtem appeared by the celebrated Sagar, a phyſician at Inglaw in Moravia, ſtill more extended, and having no fewer than thirteen claſſes, according to the following view.

Class I. VITIA.

Ord. I. *MACULÆ.*

1 Leucoma
2 Vitiligo
3 Ephelis
4 Nævus
5 Ecchymoma.

Ord. II. *EFFLORESCENTIÆ.*

6 Puſtula
7 Papula
8 Phlyctæna
9 Bacchia
10 Varus.
11 Herpes
12 Epinyctis
13 Hemeropathos
14 Pſydracia
15 Hydroa.

Ord. III. *PHYMATA.*

16 Erythema
17 Œdema
18 Emphyſema
19 Scirrhus

20 Inflammatio
21 Bubo
22 Parotis
23 Furunculus
24 Anthrax
25 Cancer
26 Paronychia
27 Phymosis.

ORD. IV. *EXCRESCENTIÆ.*

28 Sarcoma
29 Condyloma
30 Verruca
31 Pterygium
32 Hordeolum
33 Trachelophyma
34 Exostosis.

ORD. V. *CYSTIDES.*

35 Aneurysma
36 Varix
37 Marisca
38 Hydatis
39 Staphyloma
40 Lupia
41 Hydarthus
42 Apostema
43 Exomphalus.
44 Oscheophyma.

ORD. VI. *ECTOPIÆ.*

45 Exophthalmia
46 Blepharoptosis
47 Hypostaphyle
48 Paragloſſa
49 Proptoma
50 Exania
51 Exocystis
52 Hysteroptosis
53 Colpoptosis.
54 Gastrocele
55 Omphalocele
56 Hepatocele.
57 Merocele
58 Bubonocele
59 Opodeocele
60 Ischiocele
61 Colpocele
62 Perinæocele
63 Peritonæorixis
64 Encephalocele
65 Hysteroloxia
66 Parorchydium
67 Exarthrema
68 Diastasis
69 Loxarthrus
70 Gibbosita
71 Lordosis.

ORD. VII. *DEFORMITATES.*

72 Lagostoma.
73 Apella.
74 Polymerisma
75 Epidosis
76 Anchylomerisma
77 Hirsuties.

Class II. PLAGÆ.

Ord. I. *SOLUTIONES recentes, cruentæ.*

78 Vulnus
79 Punctura
80 Sclopetoplaga
81 Morsus
82 Excoriatio
83 Contusio
84 Ruptura.

Ord. II. *SOLUTIONES recentes, cruentæ, artificiales.*

85 Operatio
86 Amputatio
87 Sutura
88 Paracentesis.

Ord. III. *SOLUTIONES incruentæ.*

89 Ulcus
90 Exulceratio
91 Fistula
92 Sinus
93 Eschara
94 Caries
95 Arthrocace.

Ord. IV. *SOLUTIONES anomalæ.*

96 Rhagas
97 Ambustio
98 Fractura
99 Fissura.

Class III. CACHEXIÆ.

Ord. I. *MACIES.*

100 Tabes
101 Phthisis
102 Atrophia
103 Hæmatoporia
104 Aridura.

Ord. II. *INTUMESCENTIÆ.*

105 Plethora.
106 Polysarcia.
107 Pneumatosis
108 Anasarca
109 Phlegmatia
110 Physconia
111 Graviditas.

ORD. III. *HYDROPES partiales.*

112 Hydrocephalus
113 Phyſocephalus
114 Hydrorachitis
115 Aſcites
116 Hydrometra
117 Phyſometra
118 Tympanites
119 Meteoriſmus.

ORD. IV. *TUBERA.*

120 Rachitis
121 Scrofula
122 Carcinoma
123 Leontiaſis
124 Malis
125 Framboeſia.

ORD. V. *IMPETIGINES.*

126 Syphilis
127 Scorbutus
128 Elephantiaſis
129 Lepra
130 Scabies
131 Tinea.

ORD. VI. *ICTERITIÆ.*

132 Aurigo
133 Melaſicterus
134 Phœnigmus
135 Chloroſis.

ORD. VII. *ANOMALÆ.*

136 Phthiriaſis
137 Trichoma
138 Alopecia
139 Elcoſis
140 Gangræna
141 Neceroſis.

CLASS IV. DOLORES.

ORD. I. *VAGI.*

142 Arthritis
143 Oſtocopus
144 Rheumatiſmus
145 Catarrhus.
146 Anxietas
147 Laſſitudo
148 Stupor
149 Pruritus
150 Algor
151 Ardor

ORD. II. *CAPITIS.*

152 Cephalalgia
153 Cephalæa
154 Hemicrania
155 Ophthalmia
156 Otalgia
157 Odontalgia.

ORD. III. *PECTORIS.*

158 Pyrosis
159 Cardiogmus.

ORD. IV. *ABDOMINIS.*

160 Cardialgia
161 Gastrodynia
162 Colica
163 Hepatalgia
164 Splenalgia
165 Nephralgia
166 Hysteralgia.

ORD. V. *EXTERNARUM.*

167 Mastodynia
168 Rachialgia
169 Lumbago
170 Ischias.
171 Proctalgia
172 Pudendagra.
173 Digitium.

CLASS V. FLUXUS.

ORD. I. *SANGUIFLUXUS.*

174 Hæmorrhagia.
175 Hæmoptysis
176 Stomacace
177 Hæmatemesis
178 Hæmaturia
179 Metrorrhagia
180 Abortus.

ORD. II. *ALVIFLUXUS sanguinolenti.*

181 Hepatirrhœa
182 Hæmorrhois
183 Dysenteria
184 Melæna.

ORD. III. *ALVIFLUXUS non sanguinolenti.*

185 Nausea
186 Vomitus
187 Ileus
188 Cholera
189 Diarrhœa
190 Cœliaca
191 Lienteria
192 Tenesmus
193 Proctorrhœa.

ORD. IV. *SERIFLUXUS.*

194 Ephidrosis
195 Epiphora
196 Coryza
197 Ptyalismus

198 Anacatharſis
199 Diabetes
200 Enureſis
201 Pyuria
202 Leucorrhœa
203 Lochiorrhœa
204 Gonorrhœa
205 Galactirrhœa
206 Otorrhœa.

ORD. V. *AERIFLUXUS.*

207 Flatulentia
208 Ædoſophia
209 Dyſodia.

CLASS VI. SUBPRESSIONES.

ORD. I. *EGEREMDORUM.*

210 Adiapneuſtia
211 Sterilitas
212 Iſchuria
213 Dyſuria
214 Aglactatio
215 Dyſlochia.

ORD. II. *INGERENDORUM.*

216 Dyſphagia
217 Angina.

ORD. III. *IMI VENTRIS.*

218 Dyſmenorrhœa
219 Dyſtocia
220 Dyshæmorrhois
221 Obſtipatio.

CLASS VII. SPASMI.

ORD. I. *TONICI PARTIALES.*

222 Strabiſmus
223 Triſmus
224 Obſtipitas
225 Contractura
226 Crampus
227 Priapiſmus.

ORD. II. *TONICI GENERALES.*

228 Tetanus
229 Catochus.

ORD. III. *CLONICI PARTIALES.*

230 Nystagmus
231 Carphologia
232 Subsultus
233 Pandiculatio
234 Apomystosis
235 Convulsio
236 Tremor
237 Palpitatio
238 Claudicatio.

ORD. IV. *CLONICI GENERALES.*

239 Phricasmus
240 Eclampsia
241 Epilepsia
242 Hysteria
243 Scelotyrbe
244 Beriberia.

CLASS VIII. ANHELATIONES.

ORD. I. *SPASMODICÆ.*

245 Ephialtes
246 Sternutatio
247 Oscedo
248 Singultus
249 Tussis.

ORD. II. *SUPPRESSIVÆ.*

250 Stertor
251 Dyspnœa
252 Asthma
253 Orthopnœa
254 Pleurodyne
255 Rheuma.
256 Hydrothorax
257 Empyema.

CLASS IX. DEBILITATES.

ORD. I. *DYSÆSTHESIÆ.*

258 Amblyopia
259 Caligo
260 Cataracta
261 Amaurosis
262 Anosmia.
263 Ageusia
264 Dysecoea
265 Paracusis.
266 Cophosis
267 Anesthesia.

ORD. II. *ANEPITHYMIÆ.*

268 Anorexia
269 Adipsia
270 Anaphrodysia.

ORD. III. *DYSCINESIÆ.*

271 Mutitas
272 Aphonia
273 Pfelliſmus.
274 Cacophonia
275 Paralyſis
276 Hemiplegia
277 Paraplexia.

ORD. IV. *LEIPOPSYCHIÆ.*

278 Aſthenia
279 Lipothymia
280 Syncope
281 Aſphyxia.

ORD. V. *COMATA.*

282 Catalepſis
283 Ecſtaſis
284 Typhomania
285 Lethargus
286 Cataphora
287 Carus
288 Apoplexia.

CLASS X. EXANTHEMATA.

ORD. I. *CONTAGIOSA.*

289 Peſtis
290 Variola
291 Pemphigus
292 Purpura
293 Rubeola
294 Scarlatina.

ORD. II. *NON CONTAGIOSA.*

295 Miliaris
296 Eryſipelas
297 Eſſera
298 Aphtha.

CLASS XI. PHLEGMASIÆ.

ORD. I. *MUSCULOSÆ.*

299 Phlegmone
300 Cynanche
301 Myoſitis
302 Carditis.

ORD. II. *MEMBRANACEÆ.*

303 Phrenitis
304 Diaphragmitis
305 Pleuritis
306 Gastritis
307 Enteritis
308 Epiploitis
309 Cystitis.

ORD. III. *PARENCHYMATOSÆ.*

310 Cephalitis
311 Peripneumonia
312 Hepatitis
313 Splenitis
314 Nephritis
315 Metritis.

CLASS XII. FEBRES.

ORD. I. *CONTINUÆ.*

316 Judicatoria
317 Humoraria
318 Frigeraria
319 Typhus
320 Hectica.

ORD. II. *REMITTENTES.*

321 Amphimerina
322 Tritæophya
323 Tetartophya.

ORD. III. *INTERMITTENTES.*

324 Quotidiana
325 Tertiana
326 Quartana
327 Erratica.

CLASS XIII. VESANIÆ.

ORD. I. *HALLUCINATIONES.*

328 Vertigo
329 Suffusio
330 Diplopia
331 Syrigmos
332 Hypochondriasis
333 Somnambulismus.

ORD. II. *MOROSITATES.*

334 Pica
335 Bulimia
336 Polydipſia
337 Antipathia
338 Noſtalgia
339 Panophobia
340 Satyriaſis
341 Nymphomania
342 Tarantiſmus
343 Hydrophobia
344 Rabies.

ORD. III. *DELIRIA.*

345 Paraphroſyne
346 Amentia
347 Melancholia
348 Dæmonomania
349 Mania.

ORD. IV. *ANOMALÆ.*

350 Amneſia
351 Agrypnia.

SYNOPTICAL VIEW

OF THE

SYSTEM OF DR. MACBRIDE

IN the year 1772 appeared a ſyſtem of practice by Dr. Macbride, of Dublin; and, connected with it, an appropriate Noſology was formed by him. It circumſcribes the claſſes to four, and alſo the orders in a ſimilar proportion.

Class I. UNIVERSAL DISEASES.

Ord. I. *FEVERS.*

1 Continued
2 Intermittent
2 Remittent
4 Eruptive
5 Hectic.

Ord. II. *INFLAMMATIONS.*

6 External
7 Internal.

Ord. III. *FLUXES.*

8 Alvine
9 Hæmorrhage
10 Humoral diſcharge.

Ord. IV. *PAINFUL DISEASES.*

11 Gout
12 Rheumatiſm
13 Oſtocopus
14 Head-ach

15 Tooth-ach
16 Ear-ach
17 Pleurodyne
18 Pain in the ſtomach
19 Colic
20 Lithiaſis
21 Iſchuria
22 Proctalgia.

ORD. V. *SPASMODIC DISEASES.*

23 Tetanus
24 Catochus
25 Locked-jaw
26 Hydrophobia
27 Convulſion
28 Epilepſy
29 Eclampſia
30 Hieranoſos.

ORD. VI. *WEAKNESS and PRIVATIONS.*

31 Coma
32 Palſy
33 Fainting.

ORD. VII. *ASTHMATIC DISORDERS.*

34 Dyſpnœa
35 Orthopnœa
36 Aſthma
37 Hydrothorax
38 Empyema.

ORD. VIII. *MENTAL DISEASES.*

39 Mania
40 Melancholia.

ORD. IX. *CACHEXIES, or Humoral Diſeaſes.*

41 Corpulency
42 Dropſy
43 Jaundice
44 Emphyema
45 Tympany
46 Phyſconia
47 Atrophia
48 Oſteoſarcoſis
49 Sarcoſtoſis
50 Mortification
51 Scurvy
52 Scrofula
53 Cancer
54 Lues Venerea.

CLASS II. LOCAL DISEASES.

ORD. I. *OF THE INTERNAL SENSES.*

55 Loſs of Memory
56 Hypochondriaſis
57 Loſs of Judgment.

ORD. II. *OF THE EXTERNAL SENSES.*

58 Blindneſs
59 Depraved Sight
60 Deafneſs
61 Depraved Hearing
62 Loſs of Smell
63 Depraved Smell
64 Loſs of Taſte
65 Depraved Taſte
66 Loſs of Feeling.

ORD. III. *OF THE APPETITES.*

67 Anorexia
68 Cynorexia
69 Pica
70 Polydypſia
71 Satyriaſis
72 Nymphomania
73 Anaphrodiſia.

ORD. IV. *OF THE SECRETIONS AND EXCRETIONS.*

74 Epiphora
75 Coryza
76 Ptyaliſm
77 Anacatharſis
78 Otorrhœa
79 Diarrhœa
80 Incontinence of Urine
81 Pyuria
82 Dyſuria
83 Conſtipation
84 Teneſmus
85 Dyſodia
86 Flatulence
87 Œdoſophia.

ORD. V. *IMPEDING DIFFERENT ACTIONS.*

88 Aphonia
89 Mutitas
90 Paraphonia
91 Dyſphagia
92 Wry-neck
93 Angone
94 Sneezing
95 Hiccup
96 Cough
97 Vomiting
98 Palpitation of the Heart.
99 Corea
100 Triſmus
101 Nyſtagmus
102 Cramp
103 Scelotyrbe
104 Contraction
105 Paralyſis
106 Anchyloſis
107 Gibboſitas
108 Lordoſis
109 Hydarthrus.

ORD. VI. *OF THE EXTERNAL HABIT.*

110 Tumor
111 Excreſcence
119 Leproſy
120 Elephantiaſis

112 Aneurifm
113 Varix
114 Papulæ
115 Phlyctænæ
116 Puſtulæ
117 Scabies, or Pſora
118 Impetigo
121 Frambœſia
122 Herpes
123 Maculæ
124 Alopecia
125 Trichoma
126 Scald Head
127 Phthiriaſis.

ORD. VII. *DISLOCATIONS.*

128 Hernia
129 Prolapſus
130 Luxation.

ORD. VIII. *SOLUTIONS OF CONTINUITY.*

131 Wound
132 Ulcer
133 Fiſſure
134 Fiſtula
135 Burn or Scald
136 Excoriation
137 Fracture
138 Caries.

CLASS III. SEXUAL DISEASES.

ORD. I. *GENERAL, proper to Men.*

139 FebrisTeſticularis
140 Tabes Dorſalis

ORD. II. *LOCAL, proper to Men.*

141 Dyſpermatiſmus
142 Gonorrhœa ſimplex
143 Gonorrhœa virulenta
144 Priapiſm
145 Phymoſis
146 Paraphymoſis
147 Chryſtalline
148 Hernia Humoralis
149 Hydrocele
150 Sarcocele
151 Cirſocele.

ORD. III. *GENERAL, proper to Women.*

152 Amenorrhœa
153 Chloroſis
154 Leucorrhœa
155 Menorrhagia
156 Hyſteralgia
157 Graviditas
158 Abortus
159 Dyſtocia
160 Febris puerperalis
161 Maſtodynia.

ORD. IV. *LOCALES, proper to Women.*

162 Hydrops ovarii
163 Scirrhus ovarii
164 Hydrometra
165 Phyſometra
166 Prolapſus uteri
167 ——— vaginæ
168 Polypus Uteri

CLASS IV. INFANTILE DISEASES.

ORD. I. *GENERALES.*

169 Colica meconialis
170 Colica lactentium.
171 Diarrhœa infantum
172 Aphthæ
173 Eclampſia
174 Atrophia
175 Rachitis.

ORD. II. *LOCALES.*

176 Imperforation.
177 Anchyloglotſium
178 Aurigo
179 Purpura
180 Cruſta Lactea.

Dr. Macbride's ſyſtem was ſucceeded by that of Dr Cullen, a man faulty as a theoriſt, but whoſe Hiſtory o Diſeaſes and Syſtem of Noſology, the fruit of accurat obſervation, will remain the laſting monuments of hi fame. Before examining his ſyſtem, we ſhall conſider more modern one, or that of Dr. Darwin.

VIEW

OF THE

SYSTEM OF DR. DARWIN.

IN his introduction to the Zoönomia, an arrangement of diſeaſes is formed by Dr. Darwin on philoſophical principles; and more ſplendid therefore, and complex in its ſtructure, than uſeful in its application to practice. It is divided into four general Claſſes, under the names of Diſeaſes of Irritation, Diſeaſes of Senſation, Diſeaſes of Volition, and Diſeaſes of Aſſociation; and theſe undergo their various ſub-diviſions in the following manner:—

CLASS I.

DISEASES OF IRRITATION.

ORD. I. *INCREASED IRRITATION.*

GENUS I.—With increaſed Actions of the Sanguiferous Syſtem.

Sp. 1.	*Febris irritativa*	Irritative fever
2.	*Ebrietas*	Drunkenneſs
3.	*Hæmorrhagia arterioſa*	Arterial hæmorrhage
4.	*Hæmoptoe arterioſa*	Spitting of arterial blood
5.	*Hæmorrhagia narium*	Bleeding from the noſe.

GENUS II.—With increaſed Actions of the Secerning Syſtem.

Sp. 1.	*Calor febrilis*	Febrile heat
2.	*Rubor febrilis*	Febrile redneſs
3.	*Sudor calidus*	Warm ſweat
	—— *febrilis*	Sweat in fevers
	—— *a labore*	—— from exerciſe
	—— *ab igne*	—— from fire
	—— *a medicamentis*	—— from medicines
4.	*Urina uberior colorata*	Copious coloured urine
5.	*Diarrhœa calida*	Warm diarrhœa
	—— *febrilis*	—— from fever
	—— *crapuloſa*	—— from indigeſtion
	—— *infantum*	—— of infants
6.	*Salivatio calida*	—— ſalivation
7.	*Catarrhus calidus*	—— catarrh
8.	*Expectoratio calida*	—— expectoration
9.	*Exſudatio pone aures*	Diſcharge behind the ears
10.	*Gonorrhœa calida*	Warm gonorrhœa
11.	*Fluor albus calidus*	—— fluor albus
12.	*Hæmorrhois alba*	White piles
13.	*Serum e veſicatorio*	Diſcharge from a bliſter
14.	*Perſpiratio fœtida*	Fetid perſpiration
15.	*Crines novi*	New hairs.

GENUS III.—With increaſed Actions of the Abſorbent Syſtem.

Sp. 1.	*Lingua arida*	Dry tongue
2.	*Fauces aridæ*	Dry throat
3.	*Nares aridi*	Dry noſtrils
4.	*Expectoratio ſolida*	Solid expectoration
5.	*Conſtipatio alvi*	Coſtiveneſs
6.	*Cutis arida*	Dry ſkin
7.	*Urina parcior colorata*	Diminiſhed coloured urine

8.	*Calculus felleus et icterus*	Gall-ſtone and jaundice
9.	——— *renis*	Stone of the kidney
10.	——— *veſicæ*	Stone of the bladder
11.	——— *arthriticus*	Gout-ſtone
12.	*Rheumatiſmus chronicus*	Chronic rheumatiſm
13.	*Cicatrix vulnerum*	Healing of ulcers
14.	*Corneæ obfuſcatio*	Scar on the cornea.

GENUS IV.—With increaſed Actions of other Cavities and Membranes.

Sp. 1.	*Nictitatio irritativa*	Irritative nictitation
2.	*Deglutitio irritativa*	Irritative deglutition
3.	*Reſpiratio et tuſſis*	Reſpiration and cough
4.	*Excluſio bilis*	Excluſion of the bile
5.	*Dentitio*	Toothing
6.	*Priapiſmus*	Priapiſm
7.	*Diſtenſio mamularum*	Diſtenſion of the nipples
8.	*Deſcenſus uteri*	Deſcent of the uterus
9.	*Prolapſus ani*	Deſcent of the rectum
10.	*Lumbricus*	Round worm
11.	*Tænia*	Tape-worm.
12.	*Aſcarides*	Thread-worms.
13.	*Dracunculus*	Guinea-worm
14.	*Morpiones*	Crab-lice
15.	*Pediculi*	Lice.

GENUS V.—With increaſed Actions of the Organs of Senſe.

Sp. 1.	*Viſus acrior*	Acuter ſight
2.	*Auditus acrior*	——— hearing
3.	*Olfactus acrior*	——— ſmell
4.	*Guſtus acrior*	——— taſte
5.	*Tactus acrior*	——— touch

6.	*Senſus caloris acrior*	Acute ſenſe of heat
7.	——— *extenſionis acrior*	——— ſenſe of extenſion
8.	*Titillatio*	Tickling
9.	*Pruritus*	Itching
10.	*Dolor urens*	Smarting
11.	*Conflagratio*	Surpriſe.

Ord. II. *DECREASED IRRITATION.*

Genus I.—With decreaſed Actions of the Sanguiferous Syſtem.

Sp. 1.	*Febris inirritativa*	Inirritative fever
2.	*Pareſis inirritativa*	——— debility
3.	*Somnus interruptus*	Interrupted ſleep
4.	*Syncope*	Fainting
5.	*Hæmorrhagia venoſa*	Venous hæmorrhage
6.	*Hæmorrhois cruenta*	Bleeding piles
7.	*Hæmorrhagia renum*	——— from the kidneys
8.	——— ——— *hepatis*	——— from the liver
9.	*Hæmoptoë venoſa*	Spitting of venous blood
10.	*Palpitatio cordis*	Palpitation of the heart
11.	*Menorrhagia*	Exuberant menſtruation
12.	*Dyſmenorrhagia*	Deficient menſtruation
13.	*Lochia nimia*	Too great lochia
14.	*Abortio ſpontanea*	Spontaneous abortion
15.	*Scorbutus*	Scurvy
16.	*Vibices*	Extravaſations of blood
17.	*Petechiæ*	Purple ſpots.

GENUS II.—With decreaſed Actions of the Secerning Syſtem.

Sp. 1.	*Frigus febrile*	Coldneſs in fevers
	—— *chronicum*	—— permanent
2.	*Pallor fugitivus*	Paleneſs fugitive
	—— *permanens*	—— permanent
3.	*Pus parcius*	Diminiſhed pus
4.	*Mucus parcior*	Diminiſhed mucus
5.	*Urina parcior pallida*	Pale diminiſhed urine
6.	*Torpor hepaticus*	Torpor of the liver
7.	*Torpor pancreatis*	Torpor of the pancreas
8.	*Torpor renis*	Torpor of the kidney
9.	*Punctæ mucoſæ vultus*	Mucous ſpots on the face
10.	*Maculæ cutis fulvæ*	Tawny blots on the ſkin
11.	*Canities*	Grey hairs
12.	*Callus*	Callus
13.	*Cataracta*	Cataract
14.	*Innutritio oſſium*	Innutrition of the bones
15	*Rachitis*	Rickets
16.	*Spinæ diſtortio*	Diſtortion of the ſpine
17.	*Claudicatio coxaria*	Lameneſs of the hip
18.	*Spina protuberans*	Protuberant ſpine
19.	*Spina bifida*	Divided ſpine
20.	*Defectus palati*	Defect of the palate.

GENUS III.—With decreaſed Actions of the Abſorbent Syſtem.

Sp. 2.	*Mucus faucium frigidus*	Cold mucus from the throat
2.	*Sudor frigidus*	—— ſweat
3.	*Catarrhus frigidus*	—— catarrh
4.	*Expectoratio frigida*	—— expectoration
5.	*Urina uberior pallida*	Copious pale urine

6. *Diarrhœa frigida*	Cold diarrhœa
7. *Fluor albus frigidus*	—— fluor albus
8. *Gonorrhœa frigida*	—— gonorrhœa
9. *Hepatis tumor*	Swelling of the liver
10. *Chlorosis*	Green ſickneſs
11. *Hydrocele*	Dropſy of the vagina teſtis
12. *Hydrocephalus internus*	—— of the brain
13. *Aſcites*	—— of the belly
14. *Hydrothorax*	—— of the cheſt
15. *Hydrops ovarii*	—— of the ovary
16. *Anaſarca pulmonum*	—— of the lungs
17. *Obeſitas*	Corpulency
18. *Splenis tumor*	Swelling of the ſpleen
19. *Genu tumor albus*	White ſwelling of the knee
20. *Bronchocele*	Swelled throat
21. *Scrofula*	King's evil
22. *Schirrus*	Schirrus
23. —— *recti*	—— of the rectum
24. —— *urethræ*	—— of the urethra
25. —— *aſophagi*	—— of the throat
26. *Lacteorum inirritabilitas*	Inirritability of the lacteals
27. *Lymphaticorum inirritabilitas*	Inirritability of the lymphatics.

GENUS IV.—With decreaſed Actions of other Cavities and Membranes.

Sp. 1. *Sitis calida*	Thirſt warm
—— *frigida*	—— cold
2. *Eſuries*	Hunger
3. *Nauſea ſicca*	Dry nauſea
4. *Ægritudo ventriculi*	Sickneſs of ſtomach
5. *Cardialgia*	Heartburn
6. *Arthritis ventriculi*	Gout of the ſtomach
7. *Colica flatulenta*	Flatulent colic
8. *Colica ſaturnina*	Colic from lead
9. *Tympanitis*	Tympany

10. *Hypochondriaſis*	Hypochondriaciſm
11. *Cephalæa frigida*	Cold head-ach
12. *Odontal ia*	Tooth-ach
13. *Otalgia*	Ear-ach
14. *Pleurodyne chronica*	Chronical pain of the ſide
15. *Sciatica frigida*	Cold ſciatica
16. *Lumbago frigida*	—— lumbago
17. *Hyſteralgia frigida*	—— pain of the uterus
18. *Proctalgia frigida*	—— pain of the rectum
19. *Veſicæ felleæ inirritabilitas et ictcrus*	Inirritability of the gall-bladder and jaundice.

GENUS V.—With decreaſed Actions of the Organs of Senſe.

Sp. 1. *Stultitia inirritabilis*	Folly from inirritability
2. *Viſus imminutus*	Impaired viſion
3. *Muſcæ volitantes*	Dark moving ſpecks
4. *Strabiſmus*	Squinting
5. *Amauroſis*	Palſy of the optic nerve
6. *Auditus imminutus*	Impaired hearing
7. *Olfactus imminutus*	—— ſmell
8. *Guſtus imminutus*	—— taſte
9. *Tactu, imminutus*	—— touch
10. *Stupor*	Stupor.

ORD. III. *RETROGRADE IRRITATIVE MOTIONS.*

GENUS I.—Of the Alimentary Canal.

Sp. 1. *Ruminatio*	Chewing the cud
2. *Ructus*	Eructation
3. *Apepſia*	Indigeſtion, water-qualm
4. *Vomitus*	Vomiting
5. *Cholera*	Cholera
6. *Ileus*	Iliac paſſion

7.	*Globus hyſtericus*	Hyſteric ſtrangulation
8.	*Vomendi conamen inane*	Vain efforts to vomit
9.	*Borborigmus*	Gurgling of the bowels
10.	*Hyſteria*	Hyſteric diſeaſe
11.	*Hydrophobia*	Dread of water.

GENUS II.—Of the Abſorbent Syſtem.

Sp. 1.	*Catarrhus lymphaticus*	Lymphatic catarrh
2.	*Salivatio lymphatica*	Lymphatic ſalivation
3.	*Nauſea humida*	Moiſt nauſea
4.	*Diarrhœa lymphatica*	Lymphatic flux
5.	*Diarrhœa chylifera*	Flux of chyle
6.	*Diabætes*	Diabetes
7.	*Sudor lymphaticus*	Lymphatic ſweat
8.	*Sudor aſthmaticus*	Aſthmatic ſweat
9.	*Tranſlatio puris*	Tranſlation of matter
10.	——— *lactis*	——— of milk
11.	——— *urinæ*	——— of urine.

GENUS III.—Of the Sanguiferous Syſtem.

Sp. 1.	*Capillarium motus retrogreſſus*	Retrograde motion of the capillaries
2.	*Palpitatio cordis*	Palpitation of the heart
3.	*Anhelatio ſpaſmodica*	Spaſmodic panting.

CLASS II.

DISEASES OF SENSATION.

ORD. I.—*INCREASED SENSATION.*

GENUS I.—With increaſed Action of the Muſcles.

Sp. 1.	*Deglutitio*	Deglutition
2.	*Reſpiratio*	Reſpiration
3.	*Sternutatio*	Sneezing
4.	*Anhelitus*	Panting
5.	*Tuſſis ebriorum*	Cough of inebriates
6.	*Syngultus*	Hiccough
7.	*Aſthma humorale*	Humoral aſthma
8.	*Nictitatio ſenſitiva*	Winking from pain
9.	*Oſcitatio et pandiculatio*	Yawning and ſtretching
10.	*Teneſmus*	Teneſmus
11.	*Stranguria*	Strangury
12.	*Parturitio*	Parturition.

GENUS II.—With the Production of new Veſſels by internal Membranes or Glands, with Fever.

Sp. 1.	*Febris ſenſitiva irritata*	Senſitive irritated fever
2.	*Ophthalmia interna*	Inflammation of the eye
3.	*Phrenitis*	——— of the brain
4.	*Peripneumonia.*	——— of the lungs
	——— *trachealis*	——— the croup

5. *Pleuritis*	Inflammation of the pleura
6. *Diaphragmatis*	—— of the diaphragm
7. *Carditis*	—— of the heart
8. *Peritonitis*	—— of the peritoneum
9. *Mesenteritis*	—— of the mesentery
10. *Gastritis*	—— of the stomach
11. *Enteritis*	—— of the bowels
12. *Hepatitis*	—— of the liver
13. *Splenitis*	—— of the spleen
14. *Nephritis*	—— of the kidney
15. *Cystitis*	—— of the bladder
16. *Hysteritis*	—— of the womb
17. *Lumbago febrilis*	—— of the loins
18. *Ischias*	—— of the pelvis
19. *Paronychia interna*	—— beneath the nails.

GENUS II.—With the Production of new Vessels by external Membranes or Glands, with Fever.

Sp. 1. *Febris febrilis inirritata*	Sensitive inirritated fever
2. *Erysipelas irritatum*	Erysipelas irritated
—— *inirritatum*	—— inirritated
—— *febrilitum*	—— sensitive
3. *Tonsillitis interna*	Angina internal
—— *superficialis*	—— superficial
—— *inirritata*	—— inirritated
4. *Parotitis suppurans*	Mumps suppurative
—— *mutabilis*	—— mutable
—— *felina*	—— of cats
5. *Catarrhus febrilis*	Catarrh inflammatory
6. —— *contagiosus*	—— contagious
—— *equinus et caninus*	—— among horses and dogs

7. *Peripneumonia ſuperficialis*	Superficial peripneumony
8. *Pertuſſis*	Chincough
9. *Variola diſcreta*	Small-pox diſtinct
——— *confluens*	——— confluent
——— *inoculata*	——— inoculated
10. *Rubeola irritata*	Meaſles irritated
——— *inirritata*	——— inirritated
11. *Scarlatina mitis*	Scarlet fever mild
——— *maligna*	——— malignant
12. *Miliaria ſudatoria*	Miliary fever ſudatory
——— *irritata*	——— irritated
——— *inirritata*	——— inirritated
13. *Peſtis*	Plague
—— *vaccina*	——— of horned cattle
14. *Pemphigus*	Bladdery fever
15. *Varicella*	Chicken-pox
16. *Urticaria*	Nettle-raſh
17. *Aphtha ſenſitiva*	Thruſh ſenſitive
—— *irritata*	——— irritated
—— *inirritata*	——— inirritated
18. *Dyſenteria*	Bloody flux
19. *Gaſtritis ſuperficialis*	Superficial inflam. of the ſtomach
20. *Enteritis ſuperficialis*	——— of the bowels.

GENUS IV.—With the Production of new Veſſels by internal Membranes or Glands, without Fever.

1. *Ophthalmia ſuperficialis*	Ophthalmy ſuperficial
——— *lymphatica*	——— lymphatic
——— *equina*	——— of horſes
2. *Pterigion*	Eye-wing
3. *Tarſitis palpebrarum*	Red eye-lids
4. *Hordeolum*	Stye
5. *Paronychia ſuperficialis*	Whitlow

6.	*Gutta roſea hepatica*	Pimpled face hepatic
	—— —— *ſtomatica*	—— ſtomatic
	—— —— *hereditaria*	—— —— hereditary
7.	*Odontitis*	Inflamed tooth
8.	*Otitis*	—— —— ear.
9.	*Fiſtula lacrymalis*	Fiſtula lacrymalis
10.	*Fiſtula in ano*	Fiſtula in ano
11.	*Hepatitis chronica*	Chronical hepatitis
12.	*Scrofula ſuppurans*	Suppurating ſcrofula
13.	*Scorbutus ſuppurans*	Suppurating ſcurvy
14.	*Schirrus ſuppurans*	Suppurating ſchirrus
15.	*Cáre noma*	Cancer
16.	*Arthrocele*	Swelling of the joints
17.	*Arthropuoſis*	Suppuration of the joints
18.	*Caries oſſium*	Caries of the bones.

GENUS V.—With the Production of new Veſſels by external Membranes or Glands, without Fever.

Sp. 1.	*Gonorrhœa venerea*	Clap
2.	*Syphilis*	Venereal diſeaſe
3.	*Lepra*	Leproſy
4.	*Elephantiaſis*	Elephantiaſis
5.	*Frambœſia*	Frambœſia
6.	*Pſora*	Itch
7.	*Pſora ebriorum*	Itch of drunkards
8.	*Herpes*	Herpes
9.	*Zona ignea*	Shingles
10.	*Annulus repens*	Ring-worm
11.	*Tinea capitis*	Scald-head
12.	*Cruſta lactea*	Milk-cruſt
13.	*Trichoma*	Plica polonica.

GENUS VI.—With Fever conſequent to the Production of new Veſſels or Fluids.

Sp. 1.	*Febris ſenſitiva*	Senſitive fever
2.	—— *a pure clauſo*	Fever from concealed matter
3.	—— *a vomica*	—— from vomica
4.	—— *ab empyemate*	—— from empyema
5.	—— *meſenterica*	—— meſenteric
6.	—— *a pure aërato*	—— from aërated matter
7.	—— *a phthiſi*	—— from conſumption
8.	—— *ſcrofuloſa*	—— ſcrofulous
9.	—— *iſchiadica*	—— from iſchias
10.	—— *arthropuodica*	—— from joint-evil
11.	—— *a pure contagioſo*	—— from contagious matter
12.	—— *varioloſa ſecundaria*	—— ſecondary of ſmall-pox
13.	—— *carcinomatoſa*	—— cancerous
14.	—— *venerea*	—— venereal
15.	—— *a ſanie contagioſa*	—— from contagious ſanies
16.	—— *puerpera*	—— puerperal
17.	—— *a ſphacelo*	—— from ſphacelus.

GENUS VII. With increaſed Action of the Organs of Senſe.

Sp. 1.	*Delirium febrile*	Delirium of fevers
2.	——— *maniacale*	——— maniacal
3.	——— *ebrietatis*	——— of drunkenneſs
4.	*Somnium*	Dreams
5.	*Hallucinatio visûs*	Deception of ſight
6.	——— *auditus*	——— of hearing
7.	*Rubor a calore*	Bluſh from heat
8.	—— *jucunditalis*	—— from joy
9.	*Priapiſmus amatorius*	Amorous priapiſm
10.	*Diſtentio mamularum*	Diſtenſion of the nipples

Ord. II. *DECREASED SENSATION.*

Genus I.—With decreased Action of the general System.

Sp. 1.	*Stultitia insensibilis*	Folly from insensibility
2.	*Tædium vitæ*	Irksomeness of life
3.	*Paresis sensitiva*	Sensitive debility.

Genus II.—With decreased Actions of particular Organs.

1.	*Anorexia*	Want of appetite
2.	*Adipsia*	Want of thirst
3.	*Impotentia*	Impotence
4.	*Sterilitas*	Barrenness
5.	*Insensibilitas artuum*	Insensibility of the limbs
6.	*Dysuria insensitiva*	Insensibility of the bladder
7.	*Accumulatio alvina*	Accumulation of fæces

Ord. III. *RETROGRADE SENSITIVE MOTIONS.*

Genus I.—Of Excretory Ducts.

	Motus retrogressus	Retrograde motion
1.	—— *ureterum*	—— of the ureters
2.	—— *urethræ*	—— of the urethra
3.	—— *ductus choledòci*	—— of the bile-duct.

CLASS III.

DISEASES OF VOLITION.

Ord. I. *INCREASED VOLITION.*

Genus I.—With increaſed Actions of the Muſcles.

Sp. 1.	*Jactitatio*	Reſtleſſneſs
2.	*Tremor febrilis*	Febrile trembling
3.	*Clamor*	Screaming
4.	*Riſus*	Laughter
5.	*Convulſio*	Convulſion
	——— *debilis*	——— weak
6.	——— *dolorifica*	——— painful
7.	*Epilepſia*	Epilepſy
8.	——— *dolorifica*	——— painful
9.	*Somnambuliſmus*	Sleep-walking
10.	*Aſthma convulſivum*	Aſthma convulſive
11.	——— *dolorificum*	——— painful
12.	*Stridor dentium*	Gnaſhing of the teeth
13.	*Tetanus triſmus*	Cramp of the jaw
14.	——— *dolorificus*	——— painful
15.	*Hydrophobia*	Dread of water

GENUS II.—With increaſed Actions of the Organs of Senſe.

Sp. 1.	*Mania mutabilis*	Mutable madneſs
2.	*Studium inane*	Reverie
3.	*Vigilia*	Watchfulneſs
4.	*Erotomania*	Sentimental love
5.	*Amor ſui*	Vanity
6.	*Noſtalgia*	Deſire of home
7.	*Spes religioſa*	Superſtitious hope
8.	*Superbia ſtemmatis*	Pride of family
9.	*Ambitio*	Ambition
10.	*Mæror*	Grief
11.	*Tædium vitæ*	Irkſomeneſs of life
12.	*Deſiderium pulchritudinis*	Loſs of beauty
13.	*Paupertatis timor*	Fear of poverty
14.	*Lethi timor*	—— of death
15.	*Orci timor*	—— of hell
16.	*Satyriaſis*	Luſt
17.	*Ira*	Anger
18.	*Rabies*	Rage
19.	*Citta*	Depraved appetite
20.	*Cacoſitia*	Averſion to food
21.	*Syphilis imaginaria*	Imaginary pox
22.	*Pſora imaginaria*	——— itch
23.	*Tabes imaginaria*	——— tabes
24.	*Sympathia aliena*	Pity
25.	*Educatio heroica*	Heroic education.

Ord. II. *DECREASED VOLITION.*

Genus I.—With decreaſed Actions of the Muſcles.

Sp. 1.	*Laſſitudo*	Fatigue
2.	*Vacillatio ſenilis*	See-ſaw of old age
3	*Tremor ſenilis*	Tremor of old age
4.	*Brachiorum paralyſis*	Palſy of the arms
5.	*Raucedo paralytica*	Paralytic hoarſeneſs
6.	*Veſicæ urinariæ paralyſis*	Palſy of the bladder
7.	*Recti paralyſis*	Palſy of the rectum
8.	*Pareſis voluntaria*	Voluntary debility
9.	*Catalepſis*	Catalepſy
10.	*Hemiplegia*	Palſy of one ſide
11.	*Paraplegia*	Palſy of the lower limbs
12.	*Somnus*	Sleep
13.	*Incubus*	Night-mare
14.	*Lethargus*	Lethargy
15.	*Syncope epileptica*	Epileptic fainting
16.	*Apoplexia*	Apoplexy
17.	*Mors a frigore*	Death from cold

Genus II.—With decreaſed Actions of the Organs of Senſe.

Sp. 1.	*Recollectionis jactura*	Loſs of recollection
2.	*Stultitia voluntaria*	Voluntary folly
3.	*Credulitas*	Credulity.

CLASS IV.

DISEASES OF ASSOCIATION.

Ord. I. *INCREASED ASSOCIATE MOTIONS.*

Genus I.—Catenated with Irritative Motions.

Sp. 1.	*Rubor vultûs pranſorum*	Fluſhing of the face after dinner
2.	*Sudor ſtragulis immerſorum*	Sweat from covering the face in bed
3.	*Ceſſatio ægritudinis cute excitata*	Cure of ſickneſs by ſtimulating the ſkin
4.	*Digeſtio aucta frigore cutaneo*	Digeſtion increaſed by coldneſs of the ſkin
5.	*Catarrhus a frigore cutaneo*	Catarrh from cold ſkin
6.	*Abſorptio cellularis aucta vomitu*	Cellular abſorption increaſed by vomiting
7.	*Syngultus nephriticus*	Nephritic hiccough
8.	*Febris irritativa*	Irritative fever

Genus II.—Catenated with Senſitive Motions.

Sp. 1.	*Lacrymar. fluxus ſympatheticus*	Sympathetic tears
2.	*Sternutatio a lumine*	Sneezing from light

3. *Dolor dentium a Stridore*	Tooth-edge from grating ſounds
4. *Riſus ſardonicus*	Sardonic ſmile
5. *Salivæ fluxus cibo viſo*	Flux of ſaliva at ſight of food
6. *Tenſio mamularum viſo puerulo*	Tenſion of the nipples of lacteſcent women at ſight of the child
7. *Tenſio penis in hydrophobia*	Tenſion of the penis in hydrophobia
8. *Teneſmus calculoſo*	Teneſmus from ſtone
9. *Polypus narium ex aſcaride*	Polypus of the noſe from aſcarides
10. *Crampus ſuarum in diarrhœa*	Cramp from diarrhœa
11. *Zona ignea nephritica*	Nephritic ſhingles
12. *Eruptio variolarum*	Eruption of ſmall-pox
13. *Gutta roſea ſtomatica*	Stomatic roſy drop
14. —— —— *hepatica*	Hepatic roſy drop
15. *Podagra*	Gout
16. *Rheumatiſmus*	Rheumatiſm
17. *Eryſipelas*	Eryſipelas
18. *Teſtium tumor in gonorrhœa*	Swelled teſtis in gonorrhœa
19. —— —— *in parotitide*	—— —— in mumps.

GENUS III.—Catenated with Voluntary Motions.

Sp. 1. *Deglutitio invita*	Involuntary deglutition
2. *Nictitatio invita*	—— —— nictitation
3. *Riſus invita*	—— —— laughter
4. *Luſus digitorum invitus*	—— —— actions with the fingers
5. *Unguium morſiuncula invita*	—— —— biting the nails
6. *Vigilia invita*	—— —— watchfulneſs.

GENUS IV.—Catenated with External Influences.

Sp. 1.	*Vita ovi*	Life of an egg
2.	*Vita hiemi-dormientium*	Life of winter-fleepers
3.	*Pullulatio arborum*	Budding of trees
4.	*Orgaſmatis venerei periodus*	Periods of venereal deſire
5.	*Brachii concuſſio electrica*	Electric ſhock through the arm
6.	*Oxygenatio ſanguinis*	Oxygenation of the blood
7.	*Humectatio corporis*	Humectation of the body.

ORD. II. *DECREASED ASSOCIATE MOTIONS.*

GENUS I.—Catenated with Irritative Motions.

Sp. 1.	*Cutis frigida pranſorum*	Chillneſs after dinner
2.	*Pallor urinæ pranſorum*	Pale urine after dinner
3.	——— *a frigore cutaneo*	——— from cold ſkin
4.	*Pallor ex ægritudine*	Paleneſs from ſickneſs
5.	*Dyſpnœa a balneo frigido*	Shortneſs of breath from cold bathing
6.	*Dyſpepſia a pedibus frigidis*	Indigeſtion from cold feet
7.	*Tuſſis a pedibus frigidis*	Cough from cold feet
8.	—— *hepatica*	Liver-cough
9.	—— *arthritica*	Gout-cough
10.	*Vertigo rotatoria*	Vertigo rotatory
11.	——— *viſualis*	——— viſual
12.	——— *ebrioſa*	——— inebriate
13.	——— *febriculoſa*	——— feveriſh
14.	——— *cerebroſa*	——— from the brain
15.	*Murmur aurium vertiginoſum*	Noiſe in the ears

16. *Tactus, guſtus, olfactus vertiginoſi* — Vertiginous touch, taſte, ſmell
17. *Pulſus mollis a vomitione* — Soft pulſe in vomiting
18. ——— *intermittens a ventriculo* — Intermittent pulſe from the ſtomach
19. *Febris inirritativa* — Inirritative fever.

GENUS II.—Catenated with Senſitive Motions.

Sp. 1. *Torpor genæ a dolore dentis* — Coldneſs of the cheek from tooth-ach
2. *Stranguria a dolore veſicæ* — Strangury from pain of the bladder
3. ——— *convulſio* — Convulſive ſtrangury
4. *Dolor termini ductûs choledochi* — Pain of the end of the bile-duct
5. *Dolor pharyngis abacido gaſtrico* — Pain of the throat from gaſtric acid
6. *Pruritus narium a vermibus* — Itching of the noſe from worms
7. *Cephalæa* — Head-ach
8. *Hemicrania et otalgia* — Partial head-ach and ear-ach
9. *Dolor humeri in hepatide* — Pain of ſhoulder in hepatitis
10. *Torpor pedum variolâ erumpente* — Cold feet in eruption of ſmall-pox
11. *Teſtium dolor nephriticus* — Nephritic pain of teſtis
12. *Dolor digiti minimi ſympatheticus* — Pain of little finger from ſympathy
13. *Dolor brachii in hydrope pectoris* — Pain of the arm in dropſy of the cheſt
14. *Diarrhœa a dentitione* — Diarrhœa from toothing.

GENUS III.—Catenated with Voluntary Motions.

Sp. 1.	*Titubatio linguæ*	Impediment of ſpeech
2.	*Chorea Sancti Viti*	St. Vitus's dance
3.	*Riſus*	Laughter
4.	*Tremor ex irâ*	Trembling from anger
5.	*Rubor ex irâ*	Redneſs from anger
6.	——— *criminati*	Bluſh of guilt
7.	*Tarditas paralytica*	Slowneſs from palſy
8.	——— *ſenilis*	——— of age.

GENUS IV.—Catenated with External Influences.

Sp. 1.	*Somni periodus*	Periods of ſleep
2.	*Studii inanis periodus*	——— of reverie
3.	*Hemicraniæ periodus*	——— of head-ach
4.	*Epilepſiæ dolorificæ periodus*	——— of painful epilepſy
5.	*Convulſionis dolorificæ periodus*	——— of painful convulſion
6.	*Tuſſis periodicæ periodus*	——— of periodic cough
7.	*Catameniæ periodus*	——— of catamenia
8.	*Hæmorrhoidis periodus*	——— of the piles
9.	*Podagræ periodus*	——— of the gout
10.	*Eryſipelatis periodus*	——— of eryſipelas
11.	*Febrium periodus*	——— of fevers.

Ord. III.—*RETROGRADE ASSOCIATE MOTIONS.*

Genus I.—Catenated with Irritative Motions.

Sp. 1. *Diabætes irritata*	Diabetes from irritation
2. *Sudor frigidus in aſthmate*	Cold ſweat in aſthma
3. *Diabætes a timore*	Diabetes from fear
4. *Diarrhœa a timore*	Diarrhœa from fear
5. *Pallor et tremor a timore*	Paleneſs and trembling from fear
6. *Palpitatio cordis a timore*	Palpitation of the heart from fear
7. *Abortio a timore*	Abortion from fear
8. *Hyſteria a timore*	Hyſterics from fear.

Genus II.—Catenated with Senſitive Motions.

Sp. 1. *Nauſea idealis*	Nauſea from ideas
2. ——— *a conceptu*	Nauſea from conception
3. *Vomitio vertiginoſa*	Vomiting from vertigo
4. ——— *a calculo in uretere*	——— from ſtone in the ureter
5. ——— *ab inſultu paralytico*	——— from ſtroke of palſy
6. ——— *a titilatione faucium*	——— from tickling the throat
7. ——— *cute ſympathetica*	——— from ſympathy with the ſkin.

GENUS III.—Catenated with Voluntary Motions.

Sp. 1.	*Ruminatio.*	Rumination
2.	*Vomitio voluntaria*	Voluntary vomiting
3.	*Eructatio voluntaria*	———— eructation.

GENUS IV.—Catenated with External Influences.

Sp. 1.	*Catarrhus periodicus*	Periodical catarrh
2.	*Tuſſis periodica*	Periodic cough
3.	*Hyſteria a frigore*	Hyſterics from cold
4.	*Nauſea pluvialis*	Sickneſs againſt rain.

The Noſographie Philoſophique of Monſieur Pinel, and alſo the work of Ploucquet, we do not think of ſufficient merit to require a detail.

MANCHESTER MEDICAL SOCIETY

VIEW

OF THE

SYSTEM OF DR. CULLEN.

HAVING diſcuſſed theſe different Syſtems of Noſology, which we conſider as all faulty, in being too extended, and in having their diſtinctions often formed on opinion or theory rather than obvious fact, contrary to the general rules laid down—we ſhall, laſt of all, examine that of Dr. Cullen, as better adapted to views of practice, and as being alſo recommended by the greater ſimplicity of its arrangement.

This ſyſtem is divided into four general claſſes—of *pyraxiæ*, or diſeaſes of increaſed action; of *neuroſes*, or diſeaſes of deranged ſenſe and motion; of *cachexiæ*, or diſeaſes of depraved conſtitution; and of *locales*, or diſeaſes affecting but a part.

Theſe claſſes are again ſubdivided into their ſeveral orders and genera; and theſe ſub-diviſions are rendered more complete by ſynonymes explaining the connection of this with former ſyſtems, and with the moſt accurate hiſtories of diſeaſe by different authors.

This ſyſtem, therefore, we ſhall adopt, with ſuch alterations as experience leads us to prefer; omitting entirely the ſynonymes, as fit only for occaſional conſultation, not for the preſent work.

CLASS I.

I. DISEASES OF INCREASED ACTION (PYREXIÆ; ex πυρ, *fire*, and ἕξις, *habit*).

CHARACTER—Rigor of various duration; sometimes, though rarely, wanting; succeeded by quickened pulse and increased heat, interruption or disorder of several functions, general diminution of strength, particularly felt in the joints.

ORDER I. FEVERS (FEBRES).

Preceding and present debility. Pyrexia, no primary local disease.

§ 1. *Intermittents* (*Intermittentes*).

Fevers, the effect of marsh contagion, characterised by their number of paroxysms never exceeding one in a day, succeeded again by strong exacerbations, and in general by shivering.

Vide vol. I. p. 195.

GENUS I. *The Tertian Intermittent* (*Tertiana*).

The general intermittent character of attacking in paroxysms, with an interval of about forty-eight hours: the accessions at noon.

The tertian is modified in its appearance by ſeveral circumſtances:

1. By its intermiſſion, or apyrexia, varying.

A. From the different length of its paroxyſms.

a. Not exceeding twelve hours.

b. Extending beyond twelve hours.

B. From the various returns of its paroxyſms.

a. Having a daily return of equal length, and ſimilar in their alternation.

b. Having one every ſecond day, and two paroxyſms on that day.

c. Having a return daily, with two paroxyſms one day, and one only the other.

d. Having a daily paroxyſm, with an intervening remiſſion, greater between the odd and even day than *vice verſa*.

C. From the different combinations of its ſymptoms.

a. Combined with a comatoſe, or drowſy, ſtate.

b. Combined with ſpaſmodic and convulſive appearances.

c. Combined with a cutaneous eruption or efflorescence.

D. From its connection with other diſeaſes.

E. From ſome difference in its cauſe or origin.

2. By its ſhowing a remiſſion only.

II. THE QUARTAN INTERMITTENT (QUARTANA.)

The general intermittent character, with an interval of about ſeventy-two hours, and afternoon acceſſions.

The quartan, like the tertian, is modified by different circumſtances.

1. By its intermiſſion varying.

A. In its type, or period.

a. By having ſimple paroxyſms every fourth day, and none in the intermediate ſpace or days.

b. By having two paroxyſms every fourth day, and none in the intermediate ſpace or days.

c. By having three paroxyſms every fourth day, and none in the intermediate ſpace or days.

d. By having only, of the four days, the third free from fever, with ſimilar paroxyſms every fourth day.

e. By having a daily attack, but the paroxyſms of the fourth day only alike.

B. In its ſymptoms.

C. In its complication with other diſeaſes.

2. By its remiſſion only varying.

III. THE QUOTIDIAN INTERMITTENT (QUOTIDIANA.)

The general intermittent character, with an interval of about twenty-four hours, and morning paroxyſms.

Its variety is diſplayed,

1. In its intermiſſion.

A. Being ſolitary or ſimple.

a. Univerſal, or recurring at the ſame morning hour.

b. Partial.

B. Being complicated with other diſeaſes.

2. In its remiſſion only.

§ 2. *Continued Fevers* (*Continuæ*).

Fevers continuing, and diſtinguiſhed by no intermiſſion; ariſing alſo from a different cauſe than intermittents; diſcovering various remiſſions and exacerbations, though not always ſtrongly marked; with two daily paroxyſms.

V. INFLAMMATORY FEVER (SYNOCHA.)

Great increaſe of heat; pulſe accelerated, ſtrong, and hard; urine high-coloured; animal functions ſlightly affected.

Vide vol. I. p. 3.

. LOW FEVER (TYPHUS).

Infectious; ſlight increaſe of heat; pulſe weak, ſmall, and in general accelerated; little change of urine; great diſturbance of animal functions; great proſtration of ſtrength.

The ſpecies or varieties are,

1. *The Spotted, or Petechial* (*Typhus Petechialis*).
   a. The mild.
   b. The malignant.
2. *The Jaundiced, or Yellow* (*T. Icterodes*).

Vide vol. I. p. 65, 113, 118.

VI. COMPOUND FEVER (SYNOCHUS).

Contagious; a compound of ſynocha and typhus, being marked at firſt by inflammatory ſymptoms, and afterwards by ſymptoms purely nervous.

Vide vol. I. p. 193.

Hectic Fever (*Hectica*).

Daily fever, with noon and evening acceſſions, morning remiſſions, rarely intermiſſions. In its progreſs, for the moſt part, nocturnal ſweats, and the urine depoſiting a lateritious ſediment.

Order II. Inflammations.

Phlegmasiæ (ex φλεγμαινω, *I burn*).

Inflammatory fever, local inflammation, or phlogoſis and pain in a particular external place, with leſion of the function of ſome internal part: the blood, when drawn and concreted, covered with ſize.

VII. LOCAL INFLAMMATION (PHLOGOSIS; ex φλοξ, φλογος, *flame*).

Pyrexia; redneſs of ſkin, ſwelling, heat, and pain.
Vide vol. I. p. 5; and vol. II. p. 5.

The varieties are,

1. *The Phlegmonic Species* (*Phlegmone*),

Or inflammation of a bright red colour, with a defined tumor, for the moſt part elevated to a point, often terminating in abſceſs, and marked with a throbbing pain.

It is diſtinguiſhed by,

a. The variety of its form.

b. The nature of the part affected.

2. *The Roſy Species* (*Erythema*),

Or inflammation of a ruddy colour, vaniſhing on preſſure; an unequal and creeping circumference, with ſcarce any tumor, terminating in cuticular ſcales, puſtules, or veſicles; a ſenſe of burning pain.

It is diſtinguiſhed,

a. By its degree of violence or intenſity.

b. By its remote cauſe.

c. By its being complicated with other diſeaſes.

Local inflammation, or phlogoſis, is terminated by

1. *Impoſthume* (*Apoſtema*).

When the pain, throbbing, and pulſation, have ceaſed, and there ariſes a tumor of a clear ſhining appearance, whitiſh, itching, ſoft, and unfixed.

2. *Gangrene* (*Gangræna*).

When the part grows livid, duſkiſh, and of a leaden hue, loſing ſenſibility, turning ſoft, and having frequently watery veſicles on the ſurface.

3. *Mortification* (*Spacelus*).

When the parts become entirely black and flaccid, loſing all feeling and heat, attended with a fœtor and quick-ſpreading corruption.

VIII. INFLAMMATION OF EYE (OPHTHALMIA; ex ὀφθαλμος, *the eye*.)

Redneſs, pain, and ſwelling, of the eye; impatience of light; for the moſt part with effuſion of tears; ſometimes dryneſs of the organ.

Vide vol. I. p. 11; vol. II. p. 179; and vol. IV. p. 157.

The various ſpecies are,

§ 1. Idiopathic.

1. *The Inflammation of the Membranes* (*Ophthalmia Membranarum*);

Or inflammation in the tunica adnata, and the membranes lying under it, or in the coats of the eye.

It varies,

a. In the degree of the external inflammation.

b. In the various affection of the internal coats,

2. *Inflammation of the Lids* (*Ophthalmia Tarsi*),

With swelling, erosion, and glutinous exudation of the tarsus palpebrarum.

§ 2. Symptomatic.

a. From disease in the eye itself.

b. From diseases of the other parts, or of the whole body.

IX. PHRENSY (PHRENITIS; ex φρενιτις, *phrensy*).

Acute pyrexia; violent head-ache; a flushing of the face, and redness of eyes; impatience of light and noise; watchfulness; impetuous delirium.

Vide vol. I. p. 9.

X. AFFECTIONS OF THROAT (CYNANCHE; ex κυων, *a dog*, and αγχω, *to suffocate*.

Pyrexia, sometimes of the typhoid species; redness and pain of the fauces: deglutition and respiration difficult, with a sense of stricture in the throat.

The species are,

1. *Tonsillary Sore Throat* (*Cynanche Tonsillaris*),

Or heat, pain, and stricture, of the mucous membrane of the fauces, particularly the tonsils, which show a tumor and redness, with synocha. *Vide* vol. I. p. 13.

2. *Malignant Sore Throat* (*Cynanche Maligna*),

Affection of the tonsils and mucous membrane of the fauces, with swelling, deep redness, or creeping, and with mucous crusts, of a whitish or ash colour, covering ulcers of a shining crimson colour; joined with typhous fever and eruptions. *Vide* vol. I. p. 123.

3. *Croup* (*Cynanche Trachealis*).

Difficult wheezing reſpiration, inſpiration loud, voice hoarſe and ſtridulous, ſlight, and hardly any apparent ſwelling of the fauces, ſwallowing little impaired, fever inflammatory. *Vide* vol. I. p. 15; vol. IV. p. 85.

4. *Pharyngeal Sore Throat* (*Cynanche Pharyngea*),

Redneſs moſt prevalent at the bottom of the fauces; ſwallowing exceedingly difficult and painful; reſpiration unimpaired; fever inflammatory.

5. *Parotideal Sore Throat, or Mumps* (*Cynanche Parotidea*),

Great external ſwelling of the parotid and maxillary glands; reſpiration and deglutition little impeded, or hardly impaired, fever inflammatory, though generally ſlow, and mild. *Vide* vol. IV. p. 83.

XI. PNEUMONIC INFLAMMATION (PNEUMONIA; ex πνευμων, *the lungs*).

Pyrexia, very acute pain of cheſt, difficult reſpiration, cough.

The ſpecies are,

1. *Pneumonic Peripneumony* (*Pneumonia Peripneumonia*).

The pulſe ſoft; dull pain in the breaſt, little diffuſed; reſpiration always difficult, and often impoſſible, except in an erect poſture of the body; the face ſwoln and flushed, or of a purple colour; cough, in general, moiſt, often ſtreaked with blood.

Vide vol. I. p. 16.

The varieties of it are,

§ 1. The ſimple idiopathic.

2. The idiopathic complicated with fever.

3. The ſymptomatic.

2. *Pleuritic Peripneumony* (*Peripneumonia Pleuritis*).

Pulſe hard and full; pain, in general of the ſide, acute, particularly the right ſide, confined among the ribs, and increaſed, eſpecially at inſpiration; lying on the ſide troubleſome; very painful cough, at firſt dry, afterwards humid, and often bloody.

Vide vol. I. p. 20.

Its varieties are,

§ 1. The ſimple idiopathic.

2. The complicated,

a. With fever.

b. With catarrh.

3. The ſymptomatic.

4. The falſe.

The pneumonic inflammation ends in

VOMICA. After pneumonic inflammation not terminating in reſolution, conſtant difficult reſpiration and cough, uneaſy lying on the ſound ſide, and hectic fever.

EMPYEMA. After pneumonic inflammation ending in ſuppuration, or frequently after vomica, a remiſſion of pain, while the difficult reſpiration, cough, painful lying on the ſide, and hectic fever remain, often with a ſenſe of a fluid in the breaſt, and ſymptoms of hydrothorax.

Vide vol. II. p. 269.

XII. INFLAMMATION OF THE HEART (CARDITIS; ex καρδια, *the heart*).

Pyrexia, pain about or in the region of the heart, anxiety, difficult reſpiration, cough, unequal pulſe, palpitation, fainting.

It is either,

§ 1. Idiopathic; or,

2. Symptomatic.

XIII. PERITONÆAL INFLAMMATION (PERITONITIS; ex περιτεινω, *to ſtretch round*).

Pyrexia; pain in the belly, exaſperated by the erect poſture, and no peculiar marked ſymptoms of other abdominal inflammations.

Its variations are,

1. *The Proper Peritonitis (Peritonitis Propria)*,

Or affection of the membrane, as it ſurrounds the abdomen internally.

2. *The Omental Peritonitis (Omentalis)*,

Or, as it extends over the omentum.

3. *The Meſenteric Peritonitis (Meſenterica)*,

Or, as it extends over the meſentery.

XIV. INFLAMMATION OF STOMACH (GASTRITIS; ex γαστηρ, *the ſtomach*).

Typhoid pyrexia; anxiety; burning heat and pain in the epigaſtrium, or region of the ſtomach, aggravated by whatever is taken into the ſtomach; inclination to vomit, and the ingeſta immediately rejected; hiccup.

Vide vol. I. p. 22.

Its varieties are,

§ 1. The idiopathic.

a. From internal cauſes.

1. *The Phlegmonic Gaſtritis (Phlegmonodea)*,

With acute pain, and vehement pyrexia.

2. *The Erythematous Gaſtritis* (*Erythematica*),

With ſlight pain and fever, and with roſe, or erysipelatous redneſs in the fauces.

§ 2. The ſymptomatic.

XV. INFLAMMATION OF INTESTINE (ENTERITIS; ex εντερον, *an inteſtine*).

Typhoid fever; pungent pain in the abdomen, fixed, and twiſting, as it were, acutely, round the navel; vomiting, obſtinate coſtiveneſs.

Vide vol. I. p. 24.

Its varieties are,

§ 1. The idiopathic.

1. *The Phlegmonic Enteritis* (*Phlegmonodea*),

Acute pain, vehement pyrexia, vomiting, and coſtiveneſs.

2. *The Erythematous Enteritis* (*Erythematica*),

Slight pain and fever, without vomiting, and with diarrhœa.

§ 2. Symptomatic.

XVI. INFLAMMATION OF LIVER (HEPATITIS; ex ἡπαρ, *the liver*).

Pyrexia; tenſion, and acute or obtuſe pain of the right hypochondrium, reaching to the clavicle and top of the right ſhoulder, painful and difficult lying on the left ſide; uneaſy reſpiration; dry cough; vomiting, hiccup.

1. *Acute.*

To be known by the above definition,

Vide vol. I. p. 26.

2. *Chronic.*

Where no ſigns, its preſence may be inferred from certain antecedent cauſes of hepatitis; from a ſenſe of fulneſs and weight in the right hypochondrium; from pain, more or leſs acute, felt in the ſame part; from pain upon preſſure of the right hypochondrium, or from lying on the left ſide; and, laſtly, from ſlight fever, with the above ſymptoms.

Vide vol. I. p. 30; and vol. II. p. 129.

XVII. INFLAMMATION OF SPLEEN (SPLENITIS; ex σπλην, *the ſpleen*).

Pyrexia; tenſion, heat, ſwelling, and pain, in the left hypochondrium, aggravated by preſſure, without any ſigns of nephritis.

XVIII. INFLAMMATION OF KIDNEY (NEPHRITIS; ex νεφρος, *a kidney*).

Pyrexia; pain in the region of the kidneys, often ſhooting along the courſe of the ureter, uninfluenced by motion or preſſure; frequent diſcharge of urine, either thin and without colour, or of a bright red; vomiting; numbneſs of the leg; retraction or pain of teſticle of the ſame ſide; not unfrequently vomiting or colic.

Vide vol. I. p. 30.

§ 1. Idiopathic Spontaneous.

2. Symptomatic.

XIX. INFLAMMATION OF BLADDER (CYSTITIS; *ex κυστις, a bag.*)

Pyrexia; ſwelling and pain in the hypogaſtrium; frequent and painful micturition, or its ſuppreſſion; teneſmus.

1. From internal cauſes.
2. From external cauſes.

Vide vol. I. p. 319; and vol. II. p. 307.

XX. INFLAMMATION OF WOMB (HYSTERITIS; ex *ὑστερα, the womb*).

Pyrexia; heat, tenſion, tumor, and fixed throbbing pain in the hypogaſtrium; pain in the mouth of the uterus, when touched; vomiting.

Vide vol. III. p. 279.

XXI. INFLAMMATION OF JOINTS (RHEUMATISMUS; ex *ῥευματιζω, to be infeſted with rheum*).

Pyrexia; wandering pain of the larger joints, following the courſe of the muſcles, or of the knees, joints, and elbows, increaſed by external heat, and ariſing from an evident and external cauſe.

The acute and common rheumatiſm is idiopathic.

It varies in its ſeat,

a. In the muſcles of the loins.

b. In the muſcles of the coxendix.

c. In the muſcles of the thorax.

Rheumatiſm is followed by

ARTHRODYNIA (ex *αρθρον, a joint,* and *οδυνη, pain*).

After acute rheumatiſm, a violent ſtrain, or ſubluxation, ſucceed pains in the joints or muſcles, aggravated on motion, more or leſs tranſient and alleviated by the warmth of the bed or other external heat; the joints weak, rigid, eaſily and often ſpontaneouſly growing cold; no pyrexia, and ſeldom any tumor.

Vide vol. I. p. 32.

The Lumbago and Iſchias, though ſometimes acute diſeaſes, are moſt commonly chronic; and they in general belong to this diviſion.

XXII. ODONTALGIA.

Rheumatiſm, or arthrodynia of the jaw, from caries in the teeth.

Vide vol. I. p. 211; and vol. II. p. 233.

XXIII. GOUT (PODAGRA; ex *ους, the foot,* and *αγρα, a ſeiſing*).

Hereditary; no apparent external cauſe, but preceded, for the moſt part, by an unuſual affection of the ſtomach; pyrexia; pain of a joint, generally of the great toe, and particularly infeſting the articulations of the feet and hands: returning at intervals, and often alternating with affections of the ſtomach, or other internal parts.

Vide vol. I. p. 35.

The varieties of gout are,

1. *The Regular Gout* (*Podagra Regularis*),

Acute inflammation of the joints, of ſeveral days continuance, and gradually departing with ſwelling, itching, and deſquamation of the part affected.

2. *The Atonic Gout* (*Podagra Atonica*).

Debility of the ſtomach, or other internal part, and either without the expected or uſual inflammation of the joints, or with ſlight and fugacious pain in them; with dyſpepſia, or other ſymptoms of debility, often quickly alternating.

3. *The Retrograde Gout* (*Podagra Retrograda*),

With inflammation of the joints ſuddenly diſappearing, followed immediately by debility of the ſtomach, or of ſome other internal part.

4. *The Wandering Gout* (*Podagra aberrans*),

With inflammation of ſome internal part, preceded, or not preceded, by inflammation of the joints, which quickly diſappears.

The gout is ſometimes accompanied with other diſeaſes.

XXIV. ARTHROPUOSIS (ex *αρθρον, a joint,* and *πυοσις, ſuppuration*).

Deep, obtuſe, and long-continued pains of the joints, or muſcular parts, often from contuſion; no ſwelling, or a ſlight diffuſed one; no inflammation; fever, at firſt ſlight, afterwards of the hectic kind, with abſceſs of the part.

Vide vol. II. p. 136.

Order III. Eruptions.

Exanthemata (ex *εξανθεω, I efloresce*).

Contagious diſeaſes, diſtinguiſhed by their attack only once in life; commencing with fever; diſplaying, at a certain time, eruptions, or phlogoſes, of various appearance, often numerous and ſmall, ſcattered over the ſkin.

XXV. SMALL-POX (VARIOLA).

Contagious inflammatory fever, with vomiting and pain, excited by preſſure of the epigaſtrium.

The eruption of ſmall red pimples begins on the third and ends on the fifth day, which pimples, in the courſe of eight days, ſuppurate, and at laſt fall off in cruſts, leaving often depreſſed ſcars, or little pits, in the ſkin.

Vide vol. I. p. 41; and vol. IV. p. 100.

The ſpecies, or varieties, are,

1. *The diſtinct Small-Pox* (*Variola diſcreta*),

With few puſtules, and theſe diſtinct or ſeparate, with circular margins, turgid and full; the fever ceaſing upon appearance of the eruption.

2. *The confluent Small-Pox* (*Variola confluens*),

With numerous puſtules, confluent, or intermixed with irregular margins, flaccid, with little elevation; the fever continued and increaſed by the eruption.

XXVI. CHICKEN-POX (VARICELLA).

Synocha; pimples breaking out after a ſhort and ſlight fever, which form puſtules like thoſe of the ſmall-pox, but ſeldom ſuppurate; ending in a few days in cruſts, without leaving any ſcar.

Vide vol. I. p. 45; and vol. IV. p. 109.

XXVII. MEASLES (RUBEOLA).

Infectious inflammatory fever, with ſneezing, defluxion of thin water from the eyes, dry and hoarſe cough.

On the fourth day, or a little later, appear ſmall cluſtering pimples, hardly elevated; and after three days they depart, in a ſmall mealy or branny deſquamation.

Vide vol. I. p. 47; and vol. IV. p. 106.

1. *The common Meaſles* (*Rubeola vulgaris*; ex *rubeo*, *I become red*),

With ſmall confluent cluſtering pimples, hardly elevated.

It is diſtinguiſhed,

a. By the ſymptoms being more ſevere, and a leſs regular courſe.

b. By being accompanied with cynanche.

c. By being accompanied by a putrid habit, or diatheſis.

2. *The Pocky Meaſles* (*Rubeola variolodes*),

With diſtinct and elevated pimples.

XXVIII. SCARLET FEVER (SCARLATINA).

Contagious inflammatory fever.

On the fourth day of the diſeaſe, the face becomes a little ſwelled: a florid redneſs, in large ſpots, afterwards coaleſcing, ſpreads over the ſkin, and in three days goes off in furfuraceous or branny ſcales; often ſucceeded by anaſarca.

Vide vol. I. p. 49; and vol. IV. p. 115.

Its ſpecies are,

1. *The ſimple Scarlet Fever* (*Scarlatina ſimplex*);

Not accompanied with affection of throat, or cynanche.

2. *The Cynanchical Scarlet Fever* (*Scarlatina Cynanchica*);

With ulcerous ſore throat, or cynanche.

XXIX. PLAGUE (PESTIS).

Very contagious nervous fever, marked by extreme debility.

On an uncertain day of the diſeaſe appears an eruption of buboes or carbuncles, on different parts.

Vide vol. I. p. 115.

The diſeaſe varies in degree.

XXX. ERYSIPELAS (ex ερυσιβη, *the ruſt of iron*).

Inflammatory fever of two or three days; in general with drowſineſs, often with delirium.

On ſome part of the ſkin, but oftenеſt on the face, there is an erythematous inflammation (*phlogoſis erythema*).

Vide vol. I. p. 39; and vol. IV. p. 37.

Its varieties are,

1. *The veſicular Roſe* (*Eryſipelas veſiculoſum*),

With erythema, redneſs ſpreading, occupying a broad ſpace, and terminating in ſome places in large bliſters.

2. *The pimply Roſe* (*Eryſipelas phlyctænodes*),

With erythema from many pimples, chiefly occupying parts of the trunk of the body, and quickly terminating in puſtules or ſmall bliſters.

XXXI. MILIARIA.

Synochus, anxiety, frequent ſighing, unctuous ſweats, and a ſenſe of pricking, as of pin-points, in the ſkin.

Vide vol. III. p. 284; and vol. IV. p. 117.

On an uncertain day of the diſeaſe, break out ſmall, red, diſtinct, but crowded, pimples, over the whole ſkin, except the face; on the top of which pimples, after a day or two, appear very ſmall white veſicles, remaining but a ſhort time.

XXXII. NETTLE-RASH (URTICARIA; ex *urtica, a nettle*).

Quotidian fever.

Vide vol. IV. p. 96.

On the ſecond day, reddiſh ſpots, reſembling the ſtinging of nettles, vaniſhing almoſt during the day, but returning at night with fever, and in a few days totally going off in very minute ſcales.

XXXIII. VESICULAR FEVER (PEMPHIGUS; ex *πεμφιξ, πεμφιγος, a puſtule*).

Contagious nervous fever.

On the firſt, ſecond, or third day, bliſters break out in ſeveral places, of the ſize of a ſloe or hazel-nut, which remain for ſeveral days, and then pour out a thin ichor.

XXXIV. THRUSH (APHTHA; ex *απτω, I kindle*).

Synochus.

The tongue ſomewhat ſwelled, and of a purple or livid colour, as well as the fauces; ſmall ſpecks, or eſchars, at firſt appear on the fauces and margins of the tongue, and afterwards cover the whole internal ſurface of the mouth; they are whitiſh, ſometimes ſcattered, but often coaleſcing; when rubbed off, quickly growing again, and remaining for an indeterminate time.

Vide vol. I. p. 125; and vol. IV. p. 39.

Order IV. Hæmorrhages.

(Hæmorrhagiæ; ex αἱμορῤῥαγέω, *I throw out blood.*)

Pyrexia, with a discharge of blood without any external cause or violence; the blood, on venesection, appearing as in the cases of inflammations, that is, the gluten with a separation of size, or a crust formed.

XXXV. BLEEDING AT THE NOSE (EPISTAXIS).

Pain, weight, or a sense of fulness, in the head; redness of the face; effusion of blood from the nose.

Vide vol. I. p. 51; vol. II. p. 214; and vol. IV. p. 167.

§ 1. *The Idiopathic.*

Varying according to the age of the patient.

a. The Epistaxis of Youth (*Epistaxis Juniorum*);
With signs of arterial plethora.

b. The Epistaxis of Age (*Epistaxis Senum*),
With signs of venous plethora.

§ 2. *The Symptomatic.*

a. From internal causes.

b. From external causes.

XXXVI. SPITTING OF BLOOD (HÆMOPTYSIS; ex αἷμα, *blood,* and πτυω, *to spit*).

Redness of the cheeks; sense of uneasiness, pain, or heat, in the chest; difficult respiration; irritation of the fauces; blood of a florid colour and saltish taste, often frothy, brought up by coughing, or hawking.

§ 1. *The Idiopathic.*

1. *The Plethoric Species* (*Hæmoptyſis Plethorica*),

Appearing without any external cauſe, previous cough, or ſuppreſſion of any cuſtomary evacuation.

2. *The Species from Violence* (*Hæmoptyſis Violenta*),

Occurring on the application of external violence or injury.

3. *The Phthiſical Species* (*Hæmoptyſis Phthiſica*),

Commencing after long-continued cough, with waſting and debility.

4. *The Calculous Species* (*Hæmoptyſis Calculoſa*);

With ſpitting up of ſmall calculous particles, often of a calcareous nature.

5. *The Vicarious Species* (*Hæmoptyſis Vicaria*),

Occurring after the ſuppreſſion of ſome accuſtomed evacuation.

§ 2. *The Symptomatic.*

The conſequence of hæmoptyſis is for the moſt part

Conſumption (*Phthiſis*),

Emaciation, or waſting debility; cough; hectic fever; and, in general, purulent expectoration.

Vide vol. I. p. 125.

The ſpecies and varieties of conſumption are,

1. *The Incipient Conſumption* (*Phthiſis Incipiens*),

Attended with no expectoration of pus.

2. *The Confirmed Conſumption* (*Phthiſis Confirmata*),

Marked by an expectoration of pus.

Both kinds are varied,

a. In reſpect to their remote cauſe.

b. In reſpect to the ſource of the matter or pus.

XXXVII. PILES (HÆMORRHOIS; ex *αἷμα, blood*, and *ῥεω, to flow*).

Senſe of weight or pain in the head; vertigo; pain in the loins, and heat and fullneſs about the anus; round the anus livid painful tubercles, diſcharging for the moſt part blood; which likewiſe ſometimes, without any apparent tumor, flows from within the anus.

Vide vol. I. p. 54; vol. II. p. 324.

The varieties of this diſeaſe are,

1. *The Tumid Piles* (*Hæmorrhoïs Tumens*),

From external ſwellings, with

a. Bloody diſcharge.

b. Mucous diſcharge.

2. *The Falling-down, or Procidental Piles* (*Hæmorrhoïs Procidens*),

From protruſion of the anus.

3. *The Flowing Piles* (*Hæmorrhoïs Fluens*).

Internal, with no external tumor, or protruſion of the anus.

4. *The Blind Piles* (*Hæmorrhoïs Cæca*),

With pain and tumor of the anus, and no effusion of blood.

XXXVIII. EXCESS OF MENSES (MENORRHAGIA; ex *μην, a month,* and *ῥαγας, a rupture*).

Pains in the back, loins, and belly, bearing down, or like those of child-birth; the menses exceeding the monthly flow in quantity, frequency, or duration.

Vide vol. I. p. 56; vol. III. pp. 34, 73, and 267.

The varieties are,

1. *The Excess of Bloody Discharge* (*Menorrhagia Rubra*),

In women not pregnant, nor in child-bed. Or,

2. *The Abortive or Bloody Discharge* (*Menorrhagia Abortus*),

Of pregnant women.

3. *The Lochial or Bloody Discharge* (*Menorrhagia Lochialis*),

Of women in child-bed.

4. *The Bloody Partial Discharge* (*Menorrhagia Vitiorum*),

From organic lesion, or local disease.

5. *The Whites* (*Menorrhagia Alba*).

Serous, without local affection, in women not pregnant.

6. *The Whites* (*Menorrhagia Nabothi*).

Discharge serous in pregnant women.

The following diſcharges are for the moſt part, if not always, ſymptomatic.

The *Stomace*, or bloody diſcharge from the gum.

The *Hæmatemeſis*, or blood from the ſtomach, which is in general vicarious of an accuſtomed hæmorrhage, or ſymptomatic of local diſeaſe of the ſtomach, or of what is called the morbus niger, or laſtly of external violence.

The *Hæmaturia*, or diſcharge of blood from the kidneys, is generally ſymptomatic of calculus in the kidneys, and ſometimes of putrid fevers.

The *Cyſtirrhagia*, or diſcharge of blood from the bladder, which is in general ſymptomatic of calculus in the bladder, more rarely of other diſeaſe there.

Order V. Increased white Discharges (Profluvia).

Pyrexia, increaſed morbid excretion, without blood, as a primary part.

XXXIX. CATARRH (CATARRHUS; ex *καταῤῥεω, to flow down*).

Pyrexia often contagious; morbid and increaſed excretion of mucus, from the glands of the membrane of the noſe, fauces, or bronchia; or tendency to ſuch increaſed morbid excretion.

Vide vol. I. p. 59.

Its varieties are,

1. Catarrh from cold.
2. Catarrh from contagion.

XL. DYSENTERY (DYSENTERIA; ex *δυς, bad, εντερον, an intestine,* and *ῥεω, to flow.*

Contagious pyrexia; frequent mucous or bloody ſtools, the fæces being for the moſt part retained; gripes; conſtant urgent deſire.

Vide vol. I. p. 61.

Its varieties depend,

a. On its being accompanied with worms.

b. On the dejection of ſmall maſſes of a fleſhy or ſebaceous matter.

c. On being accompanied with an intermittent fever.

d. On being without blood.

e. On being accompanied with miliary fever.

CLASS II.

NEUROSES.

Morbid ſtate of ſenſe and motion, without primary pyrexia, or without local affection.

ORDER I. COMATA.

The voluntary motions impaired, with ſleep, or a ſuſpenſion of ſenſe.

XLI. APOPLEXY (APOPLEXIA; ex *αποπλησσω, to ſtrike down ſuddenly*).

Vide vol. I. pp. 69 and 168.

The whole of the voluntary motions in ſome degree aboliſhed, with ſleep, more or leſs profound, the action of the heart and arteries continuing.

The ſpecies of idiopathic apoplexy are,

1. Apoplexia *ſanguinea*, with ſigns of univerſal plethora, and chiefly of the head.

2. Apoplexia *ſeroſa*, occurring for the moſt part in the leucophlegmatic bodies of old men.

3. Apoplexia *hydrocephalica*, coming on by degrees; affecting infants and children, firſt with laſſitude, a degree of fever and headach; afterwards with ſlow pulſe, dilatation of the pupil, and drowſineſs.

4. Apoplexia *atrabilaria*, in a perſon of a melancholic temperament.

5. Apoplexia *traumatica*, from external violence applied to the head.

6. Apoplexia *venenata*, from ſedatives internally or externally adminiſtered.

7. Apoplexia *mentalis*, from affections of the mind.

8. Apoplexia *cataleptica*, the muſcles obeying the motion of the joints, when influenced by force externally applied.

9. Apoplexia *ſuffocata*, from ſuffocation by ſomething external.

Apoplexia is frequently ſymptomatic

a. Of intermittent fever.

b. Of continued fever.

c. Of phlegmaſia.

d. Of exanthema.

e. Of hyſteria.

f. Of epilepſy.

g. Of gout.

h. Of worms.

i. Of ſuppreſſion of urine.

k. Of ſcurvy.

XLII. PARALYSIS (ex παραλυσις, *a palſy*).

Some only of the voluntary motions impaired, often with ſleep.

Vide vol. I. p. 71.

§ 1. *Idiopathic.*

1. Paralyſis *partialis*, of ſome only of the muſcles.

2. Paralyſis *hemiplegica*, of one ſide of the body.

It varies in regard to the habit of body.

a. Hemiplegia in a plethoric habit.

b. Hemiplegia in a leucophlegmatic habit.

3. Paralyſis *paraplegica*, of one half of the body taken tranſverſely.

4. Paralyſis *venenata*, from ſedatives, applied either internally or externally.

§ 2. *Symptomatic.*

Tremor, as being always ſymptomatic, I cannot admit into the number of genera; but the ſpecies enumerated by Sauvages, according as they ſeem to me to be ſymptoms either of aſthenia or paralyſis, I ſhall ſubjoin.

TREMOR; alternate and frequent motion of a joint to and fro.

1. Aſthenic ſpecies.

2. Paralytic ſpecies.

3. Convulſive ſpecies.

ORDER II. ADYNAMIÆ.

The involuntary motions, whether vital or natural, impaired.

XLIII. FAINTING (SYNCOPE; ex *συγκοπτω, to fall down*).

Action of the heart diminiſhed, or for a time ſuſpended

§ 1. *Idiopathic.*

1. Syncope *cardiaca*, often returning without apparent cauſe, with vehement palpitation of the heart at intervals: *From affection of the heart or neighbouring viſcera.*

2. Syncope *occaſionalis*, originating from an evident cauſe: *From affection of the vaſcular ſyſtem.*

§ 2. *Symptomatic*

Of diſeaſes, either of the whole ſyſtem, or of other parts, except the heart.

XLIV. DYSPEPSIA (ex δυς, *bad*, and πεπτω, *to conduct*).

Loſs of appetite, nauſea, vomiting, flatulence, eructation, rumination, heartburn, pain in the ſtomach, at leaſt ſome or more of theſe at once occurring, generally with coſtiveneſs, and without any other diſeaſe either of the ſtomach or other parts.

Vide vol. I. p. 94.

§ 1. *Idiopathic.*

§ 2. *Symptomatic.*

1. From diſeaſe of the ſtomach itſelf.

2. From diſeaſe of other parts, or of the whole body.

XLV. HYPOCHONDRIASIS (ex ὑπο, *under*, and χονδρος, *a cartilage*).

Dyſpepſia, with languor and dejection of mind; a ſenſe of fear, ariſing from inadequate cauſes, confined to perſons of a melancholic temperament.

Vide vol. I. p. 100.

There is but one idiopathic ſpecies.

XLVI. CHLORORIS (ex χλωριζω, *to look green*).

Dyſpepſia, or deſire to eat things unalimentary; paleneſs or diſcoloration of the ſkin; defect of blood in the veins, with œdematous ſwelling of the body; debility; palpitation; retention of the menſes.

Vide vol. I. p. 102.

ORDER III. SPASMI (ex σπασμος, *the cramp*).

Irregular motions of the muſcles, or muſcular fibres.

§ 1. *In the Animal Functions.*

XLVII. TETANY (TETANUS; ex τεινω, *to ſtretch*).

Spaſmodic rigidity of ſeveral muſcles.

Vide vol. I. p. 75.

It varies,

a. In degree, as in the half or whole of the body being affected with ſpaſms.

b. In reſpect of its remote cauſes, as it ariſes either from an internal cauſe, from cold, or from a wound.

c. In reſpect of the part of the body affected.

XLVIII. LOCK JAW (TRISMUS; ex *trismus, a grating noiſe*).

Spaſtic rigidity, chiefly of the lower jaw.

Vide vol. I. p. 75.

1. *The Lock Jaw of Infancy* (*Triſmus Naſcentium*),

Attacking infants during the two firſt weeks from their birth.

Vide vol. I. p. 77; and vol. IV. p. 44.

2. *The Lock Jaw from a Wound* (*Triſmus Traumaticus*),

Attacking perſons of all ages, and ariſing from cold or a wound.

Vide vol. II. p. 27.

XLIX. CONVULSION (CONVULSIO; ex *convolto, to pull together*).

Irregular and unnatural contraction of the muſcles, without ſleep.

Vide vol. IV. p. 43 and 59.

§ 1. The idiopathic.

2. The ſymptomatic.

L. CHOREA (ex χορεια, *a dance*).

Attacking young perſons of both ſexes, in general from ten to fourteen years of age, with convulſive motions partly voluntary, for the moſt part of one ſide, the motion of the arms and hands reſembling the geſticulation of mountebanks; in walking, one foot is rather dragged than lifted.

Vide vol. I. p. 78.

LI. RAPHANIA (ex ραφανος, *a radiſh*).

Spaſmodic contraction of the joints, with convulſive motions, very violent pain, periodical.

LII. EPILEPSIA (ex *epilepſis, a ſwoon*).

Convulſion of the muſcles, with ſleep.

Vide vol. I. p. 72.

¶ 1. *The Idiopathic.*

1. Epilepſia *cerebralis*, ſuddenly coming on without manifeſt cauſe; nor preceded by any troubleſome ſenſation, unleſs perhaps of vertigo or dimneſs of ſight.
2. The ſympathetic Epilepſy *(Epilepſia Sympathica)*, without manifeſt cauſe; but preceded by the ſenſation of a certain aura riſing from ſome part of the body to the head.
3. The occaſional Epilepſy *(Epilepſia occaſionalis)*, ariſing from manifeſt irritation, and ceaſing when the irritation is removed.

This varies from the diverſity of the irritating cauſe; as,

a. From injury done to the head.

b. From pain.

c. From worms.

d. From poiſon.

e. From cutaneous eruptions, or other effuſion of acrid humours, repelled.

f. From crudity in the ſtomach.

g. From affection of mind.

h. From exceſs of hæmorrhage.

i. From debility.

¶ 2. *The Symptomatic.*

§ 2. *In the Vital Functions.*

In the action of the heart.

LIII. PALPITATIO.

Violent and irregular motion of the heart.

¶ 1. *The Idiopathic.*

¶ 2. *The Symptomatic.*

In the action of the lungs.

LIV. ASTHMA (ex ασθμαζω, *to breathe with difficulty*).

Difficult respiration recurring at intervals, with a sense of stricture or tightness in the breast; wheezing respiration; difficult cough at the beginning of the fit, sometimes none, free towards the end; and often with copious spitting of mucus.

Vide vol. I. p. 79.

¶ 1. *The Idiopathic.*

1. The spontaneous Asthma (*Asthma spontaneum*), without manifest cause, or being accompanied with any other disease.
2. The exanthematic Asthma *(Asthma exanthematicum)*, from an eruption or acrid effusion repelled.
3. The plethoric Asthma *(Asthma plethoricum)*, from suppression of any usual evacuation of blood, or from spontaneous plethora or fulness.

¶ 2. *The Symptomatic.*

LV. DYSPNŒA (ex δυς, *bad*, and πνεω, *to breathe*).

Continual difficult respiration, with fulness and obstruction of breast, not with sense of stricture. Cough frequent through the whole course of the disease.

¶ 1. *Idiopathic.*

1. The catarrhal Dyspnœa *(Catarrhalis)*, with frequent cough, bringing up a copious viscid mucus.
2. The dry Dyspnœa *(Sicca)*, with cough for the most part dry.

3. Dyſpnœa from ſtate of atmoſphere (*aërea*), increaſed by every the leaſt change in the weather.

4. Dyſpnœa from earthy matter (*terrea*), the cough bringing up an earthy or calculous ſubſtance.

5. The watery Dyſpnœa (*aquoſa*); the urine in ſmall quantity, ſwelling of the feet, without fluctuation in the breaſt, or other characteriſtic ſigns of water in the cheſt.

6. The Dyſpnœa from fat (*pinguedinoſa*), in very fat perſons.

7. The thoracic Dyſpnœa (*thoracica*), from the parts incloſing the thorax being hurt or ill formed.

8. The external Dyſpnœa (*extrinſeca*), from manifeſt external cauſes.

¶ 2. *The Symptomatic.*

1. Of diſeaſes of the heart, or larger veſſels.

2. Of abdominal tumor.

3. Of various diſeaſes.

LVI. CHINCOUGH (PERTUSSIS).

Contagious; convulſive, ſuffocating cough, with a loud noiſe, called *hooping*, at each inſpiration; often with vomiting.

Vide vol. I. p. 81; vol. IV. p. 89.

§ 3. *In the Natural Functions.*

LVII. PYROSIS (ex πυρωσις, *a burning*).

Burning heat in the epigaſtrium, with copious eructations of an aqueous humour, for the moſt part inſipid, but ſometimes acrid.

Vide vol. I. p. 82.

¶ 1. The idiopathic.

2. The ſymptomatic.

LVIII. COLIC (COLICA; ex *colon*, the gut of that name).

Pain in the lower belly, chiefly with a ſenſe of twiſting or wringing round the navel; vomiting; coſtiveneſs.

Vide vol. I. pp. 84, 87; and vol. IV. p. 46.

¶ 1. *The Idiopathic.*

1. The ſpaſmodic Colic (*Colica Spaſmodica*), with refraction of the navel and ſpaſms of the abdominal muſcles.

It is varied by the ſymptoms attending it.

a. With vomiting of ſtercoraceous matter, or of things injected by the anus.

b. With inflammation.

2. The Devonſhire, or Poitou, Colic (*Colica Pictonum*); preceded by a ſenſe of weight or uneaſineſs in the lower belly, chiefly round the navel; followed by colic pain, at firſt ſlight, not continual, and generally increaſed after meat; at length more ſevere and almoſt perpetual; with pain of the arms and back, ending at laſt in palſy.

It is varied; the difference in its remote cauſe.

a. Being the effect of metallic poiſon.

b. Of acids in the inteſtines.

c. From cold.

d. Of contuſion of the back.

3. The ſtercoraceous Colic (*Colica ſtercoracea*), in perſons ſubject to coſtiveneſs, after long continued conſtipation.

4. The accidental Colic (*Colica accidentalis*), from acrid matter in the inteſtines.

5. The meconial Colic (*Colica meconialis*), in new-born children, from retention of the meconium.

6. The Colic from Callus (*Colica calloſa*), with a ſenſe of conſtriction in ſome part of the inteſtines, and often previouſly of collected flatus, with ſome pain, which flatus gradually goes off; the belly is coſtive, and at laſt the fæces are diſcharged only in a liquid ſtate, and in ſmall quantity.

7. The Colic from calculus (*Colica calculoſa*), with a fixed hardneſs in a particular part of the abdomen; calculi ejected by the anus.

¶ 2. *The Symptomatic.*

LIX. CHOLERA (ex χολη, *bile*, and ῥεω, *to flow*).

Evacuation of bilious matter in both directions; anxiety; gripes; ſpaſms of the legs.

Vide vol. I. p. 83.

¶ 1. *The Idiopathic.*

1. The ſpontaneous Cholera (*ſpontanea*), occurring in warm weather, without manifeſt cauſe.

2. The accidental Cholera (*accidentalis*), from acrid matters in the ſtomach or inteſtines.

¶ 2. *The Symptomatic.*

LX. LOOSENESS (DIARRHŒA; ex διαῤῥεω, *I flow through*).

Frequent purging; the diſeaſe not contagious; no primary fever.

Vide vol. I. p. 89; and vol. IV. p. 51.

¶ 1. *The Idiopathic.*

1. From exceſs or dilatation (*Diarrhœa crapuloſa*); the fæces diſcharged in a more liquid ſtate than is natural, and in greater quantity.

2. The bilious Diarrhœa (*bilioſa*); a great quantity of yellow fæces diſcharged.

3. The mucous Diarrhœa (*mucoſa*); copious diſcharge of mucus, the conſequence of acrid matters taken in, or of cold, eſpecially applied to the feet.

4. The cœliac Diarrhœa (*Diarrhœa cœliaca*), with diſcharge of a milky fluid, like chyle.

5. The lienteric Looſeneſs (*Diarrhœa lienteria*), with the food quickly diſcharged without any material change.

6. The hepatic Looſeneſs (*Diarrhœa hepatirrhœa*), with diſcharge of a bloody matter like ſerum, without pain

¶ 2. *The Symptomatic.*

LXI. MORBID FLOW OF URINE (DIABETES; ex δια, *through*, and βαινω, *to paſs*).

An immoderate chronic diſcharge of urine, in general unlike the natural.

Vide vol. I. p. 92.

¶ 1. *The Idiopathic.*

1. *The honey-like Diabetes* (*mellitus*), with urine of the ſmell, colour, and taſte, of honey.

2. The inſipid Diabetes (*inſipidus*), with limpid urine not ſweet.

¶ 2. *The Symptomatic.*

LXII. HYSTERIA; (ex ὑστερα, *the womb*).

Rumbling noiſe of the bowels; the feeling of a ball rolling itſelf in the abdomen, riſing towards the ſtomach and gullet, and there giving a ſenſe of ſtrangulation; ſleep; convulſions; copious diſcharge of limpid urine; the mind involuntarily, various, and unſteady.

Vide vol. I. p. 97.

It varies according to the remote cauſe; as,

a. From retardation of the menſes.

b. From exceſſive diſcharge of the menſes, bloody.

c. From exceſſive diſcharge of the menſes, ſerous, or fluor albus.

d. From viſceral obſtruction.

e. From diſeaſe of the ſtomach.

f. From exceſſive luſt.

LXIII. HYDROPHOBIA (ex ὑδωρ, *water*, and φωβεω, *I dread*).

Loathing and horror of liquids, as exciting painful convulſion of the pharynx, generally proceeding from the bite of a mad animal.

Vide vol. I. p. 110.

1. The furious or rabid Hydrophobia (*rabioſa*), with deſire of biting, from the bite of a rabid animal.

2. The ſimple Hydrophobia (*ſimplex*), without rage, or inclination to bite.

ORDER IV. VESANIÆ (ex *Vesania*, *Madness*).

Impaired judgment, no fever or coma.

LXIV. WANT OF MIND (AMENTIA; ex *a*, from, and *mens*, the mind).

Weakness of judgment, incapable of perceiving or remembering the relations of things.

1. The congenite Amentia (*congenita*), continuing from birth.
2. The Amentia of age (*senilis*), from decay of perception and memory in old age.
3. The acquired Amentia (*acquisita*), induced by evident external causes in men of sound judgment.

LXV. MELANCHOLIA (ex μελας, *black*, and χολη, *bile*).

Vide vol. I. p. 105.

Partial insanity, no dyspepsia.

Varied according to the different subjects inducing it; as,

a. From false perception of the state of the patient's health, conceived to be dangerous from slight causes; or from despondence with regard to the state of his affairs.

b. From false perception of the prosperous state of the patient's affairs.

c. From vehement love, but without satyriasis or nymphomania.

d. From superstitious fear of the future.

e. From aversion to motion and all the offices of life.

f. From inquietude and impatience in every ſituation.

g. From wearineſs of life.

h. From falſe conception of the nature of the perſon's ſpecies.

XVI. MADNESS (MANIA).

Univerſal inſanity.

Vide vol. I. p. 105.

1. The mental Mania *(mentalis)*, ariſing from affection of the mind.

2. The corporeal Mania *(corporea)*, ariſing from evident corporeal derangement.

Which varies alſo according to the diverſity of the diſeaſe.

3. The obſcure Mania *(obſcura)*, preceded by no paſſion of the mind, or evident bodily derangement.

The ſymptomatic ſpecies of Mania are,

The Paraphroſyne of Sauvages and Sagar.

a. From poiſons.

b. From paſſion.

c. From fever.

XVII. ONEIRODYNIA (ex ὀνειρος, *a dream*, and ὀδυνη, *anxiety*).

Inflamed or diſturbed imagination during ſleep.

1. The active Oneirodynia *(activa)*, inciting perſons to walking and to various motions.

2. The oppreſſive Oneirodynia *(gravans)*, with a ſenſe of incumbent weight generally oppreſſing the breaſt.

CLASS III.

CACHEXIÆ.

Depraved ſtate of the whole, or a conſiderable part, of the body; without fever or nervous affection; conſtituting a primary part of the diſeaſe.

Order I. Wastings (Marcores).

Emaciation of the whole body.

LXVIII. CONSUMPTION (TABES).

Emaciation, loſs of ſtrength, hectic fever.

1. The purulent Conſumption *(Tabes purulenta)*, proceeding from ulcer either external or internal, or from abſceſs of the lungs, and varying according to its particular ſeat.
2. The ſcrofulous Conſumption *(Tabes ſcrofuloſa)*, in ſcrofulous ſubjects.
3. The poiſoned Conſumption, *(Tabes venenata)*, proceeding from poiſon.

LXIX. ATROPHY (ATROPHIA; ex *α*, priv. and *τροφη*, *nutrition*).

Emaciation, loſs of ſtrength, no hectic fever.

1. The Atrophy from fluid profuſion (Atrophia *inanitorum*), or from exceſſive evacuation.

2. The Atrophy from ſtarvation (Atrophia *famelicorum*), or defect of nouriſhment.

3. The Atrophy from bad habit (Atrophia *cacochymica*), or corrupted food.

4. The Atrophy from weakneſs (Atrophia *debilium*), or from a depraved ſtate of the function of nutrition, without previous or exceſſive evacuation, or depraved ſtate of the humours.

Order II. Intumescentiæ.

External ſwelling of the whole, or of a conſiderable part, of the body.

§ 1. *ADIPOUS (ADIPOSÆ).*

LXX. EXCESS OF CORPULENCE (POLYSARCIA; ex πολυς, *much*, and σαρξ, *fleſh*).

Troubleſome ſwelling, depending on the increaſe of oil in the cellular texture of the body.

§ 2. *FLATULENT (FLATUOSÆ).*

LXXI. PNEUMATOSIS (ex πνευματοω, *to fill with wind.*)

Swelling of the body, diſtended, elaſtic, and crackling on the touch.

1. The ſpontaneous Pneumatoſis *(ſpontanea)*, ariſing without evident cauſe.

2. Pneumatosis *traumatica*, or from a wound in the thorax.

3. Pneumatosis *venenata*, or from poison internally or externally applied.

4. Pneumatosis *hysterica*, or combined with hysteria.

LXXII. TYMPANY (TYMPANITES; ex τυμπανίζω, *to sound like a drum*).

Vide vol. I. p. 219.

Swelling of the abdomen, tense, elastic, and sounding on being struck; costiveness; emaciation of the other parts.

1. The intestinal Tympany (*Tympanites intestinalis*), generally with unequal tumour of the abdomen, with frequent discharge of wind, which gives relief to the pain and tension.

2. The abdominal Tympany (Tympanites *abdominalis*), more sensibly resounding on the touch, the tumour more equal, the emission of wind less frequent, and giving less relief than in the former species.

LXXIII. PHYSOMETRA (ex φυσιόω, *to inflate*, and μήτρα, *the womb*).

Slight elastic tumour in the hypogastrium, resembling in figure and seat the womb.

§ 3. *DROPSIES, or AQUOSÆ.*

LXXIV. ANASARCA (ex ανα, *along*, and σαρξ, *flesh*).

Soft unelastic swelling of the whole, or part, of the body.

Vide vol. I. p. 167.

1. Anasarca *serosa*, proceeding from a retention of serum on the suppression of some accustomed evacuation; or from an increase of serum produced by an unusual quantity of water taken into the body.

2. Anaſarca *oppilata*, from compreſſion of the veins.

3. Anaſarca *exanthematica*, ſucceeding eruptions, particularly eryſipelas.

4. Anaſarca *anaemia*, from tenuity of blood, produced by hæmorrhage.

5. Anaſarca *debilium*, in perſons exhauſted by long diſeaſe, or other cauſes.

The Anaſarca purulenta can hardly be referred to this genus.

LXXV. HYDROCEPHALUS (ex ὑδωρ, *water*, and κεφαλη, *the head*).

Soft unelaſtic ſwelling of the head, the ſutures of the ſcull opening.

Vide vol. I. p. 168; and vol. IV. p. 134.

LXXVI. HYDRORACHITIS (ex ὑδωρ, *water*, and ῥαχις, *the ſpine*).

Soft ſmall ſwelling above the vertebræ of the loins, with their ſeparation.

Vide vol. II. p. 159.

LXXVII. HYDROTHORAX (ex ὑδωρ, *water*, and θωραξ, *the cheſt*).

Difficulty of breathing; paleneſs of the face; œdematous ſwellings of the lower extremities; ſcarcity of urine; difficult lying in a decumbent poſture; ſudden and ſpontaneous ſtarting out of ſleep, with palpitation of the heart; water in the cheſt fluctuating.

Vide vol. I. p. 171.

LXXVIII. ASCITES (ex ασκος, *a ſac*).

Swelling of the abdomen; tenſe; hardly elaſtic; with fluctuation.

Vide vol. I. p. 173.

1. The abdominal Aſcites *(Aſcites abdominalis)*; with equal diffuſed tumour of the whole abdomen, and with ſenſible fluctuation.

It is varied by its cauſe; as,

a. From viſceral obſtruction.

b. From debility.

c. From tenuity of the blood.

d. From the nature of the liquid effuſed.

2. The encloſed or circumſcribed Aſcites *(Aſcites faccatus)*, with partial ſwelling of the abdomen, at leaſt at the beginning, and with difficulty detected.

LXXIX. HYDROMETRA (ex ὑδωρ, *water*, and μητρα, *the womb*).

Vide vol. II. p. 274.

A ſwelling of the hypogaſtrium in women, gradually increaſing, reſuming the ſhape of the uterus; yielding to the preſſure, and fluctuating; not depending either on ſuppreſſion of urine or pregnancy.

LXXX. HYDROCELE (ex ὑδωρ, *water*, and κηλη, *a ſwelling*).

Vide vol. II. p. 275.

Tumour of the ſcrotum without pain, gradual in its increaſe, ſoft, fluctuating, pellucid.

§ 4. *SOLID* (*SOLIDÆ*).

LXXXI. PHYSCONIÆ (ex φυσκοω, *to be big-bellied*).

Partial abdominal tumor, without fluctuation, and giving no ſound when ſtruck.

Its varieties are,

1. The hepatic Phyſconia *(hepatica)*.
2. The ſplenic Phyſconia *(ſplenica)*.
3. The renal Phyſconia *(renalis)*.
4. The uterine Phyſconia *(uterina)*.
5. The ovarial Phyſconia *(ab ovario)*.
6. The meſenteric Phyſconia *(meſenterica)*.
7. The inteſtinal Phyſconia *(inteſtinalis)*.
8. The omental Phyſconia *(omentalis)*.
9. The mixed Phyſconia *(polyſplachna)*.
10. The viſceral Phyſconia *(viſceralis)*.
11. The external lupial Phyſconia *(externa lupialis)*.
12. The external ſchirroid Phyſconia *(externa ſchirrodea)*.
13. The external hydatidous Phyſconia *(externa hydatidoſa.*
14. The ſubcutaneous fatty Phyſconia *(ab adipe ſubcutaneo.*
15. The excreſcential Phyſconia *(ab excreſcentia)*.

LXXXII. RICKETS (RACHITIS; ex *ῥαχις, the back-bone).*

Head large, particular prominence of forehead, joints thick and ſwelled, ribs depreſſed, abdomen protuberant, emaciation of ſeveral other parts.

Vide vol. I. p. 187; and vol. IV. p. 151.

It varies, as being either

a. Simple, and uncombined with any other diſeaſe.

b. Or combined with other diſeaſes.

Order III. Impetigines,

(ex *in*, and *petigo, a ſcab).*

Morbid affections of the ſkin, or external parts of the body, the conſequence of a depraved habit.

LXXXIII. KING's EVIL (SCROFULA; ex *ſcrofula, a pig).*

Vide vol. I. p. 184; and vol. IV. p. 132.

Tumors of the conglobate glands, indolent and hard, eſpecially in the neck, with little or no pain; a peculiar look or looſeneſs of the eye; the upper lip and fleſhy part of the noſe tumid; the face florid; the ſkin ſoft; the abdomen large.

1. The common Scrofula (*vulgaris*), ſimple, external, enduring.

2. The meſenteric Scrofula (*meſenterica*), ſimple, internal, with paleneſs of the face, want of appetite, tumor of the abdomen, and unuſual fœtor of the fæces.

3. The tranſient Scrofula *(fugax)*, very ſimple, and only round the neck, generally occurring on reſorption from ulcers on the head.

4. The American Scrofula (*Americana*), joined with the yaws.

LXXXIV. VENEREAL DISEASE (SYPHILIS).

Primary affections of the genitals of a contagious nature, the effect of impure venery, ſucceeded by ulcers of the tonſils and cluſtered pimples on the ſkin, chiefly at the margin of the hair, going off in cruſts or ſcabby ulcers; alſo by pains in the bones, and protuberances of ſome parts of them.

Vide vol. I. p. 125; and vol. IV. p. 121.

LXXXV. SCURVY (SCORBUTUS).

Scurvy is an unuſual weakened ſtate of body, marked by bleeding of the gums, ſpots of different colours on the ſkin, for the moſt part livid, particularly at the roots of the hairs.

In cold countries, and following, for the moſt part, the uſe of a putreſcent diet or ſalted animal food, with deficiency of recent vegetable matter.

It varies in its degree and in its ſymptoms.

Vide vol. I. p. 176.

LXXXVI. ELEPHANTIASIS (ex *elephas, an elephant*).

Contagious; ſkin thick, wrinkled, rough, unctuous, diveſted of hair; loſs of feeling in the extreme joints; face deformed with tubercles; the voice hoarſe and naſal.

Vide vol. I. p. 191.

LXXXVII. LEPROSY (LEPRA, ex *lepis, a ſcale*).

The ſkin rough, with whitiſh, ſcaly, wrinkled ſcabs or ulcers, ſometimes humid below, with itchineſs.

LXXXVIII. FRAMBŒSIA (ex *framboiſe, a raſpberry*).

Swellings growing from various parts of the ſkin, the effect of ulceration, and reſembling the fruit of the raſpberry.

Vide vol. I. p. 161.

LXXXIX. TRICHOMA (ex τριχος, *to comb the hair.*)

Contagious; the hair unuſually coarſe, thick, and twiſted or matted together into inextricable knots or tufts.

XC. JAUNDICE (ICTERUS).

Yellowneſs of the eyes and ſkin, occaſionally changing to a brown or black colour; fæces whitiſh; the urine obſcurely red, tinging things dipped into it of a yellowiſh colour, and the ſame conſpicuous in the other excretions.

Vide vol. I. p. 179; and vol. IV. p. 36.

¶ 1. *Idiopathic.*

1. The calculous Jaundice (Icterus *Calculoſus*), with acute pain in the epigaſtric region, increaſed after meat, and with diſcharge of biliary concretions by ſtool.

2. The ſpaſmodic Jaundice (Icterus *ſpaſmodicus*), without pain, after ſpaſmodic diſeaſes, or affections of the mind.

3. The hepatic Jaundice (Icterus *hepaticus*), without pain, after diſeaſes of the liver.

4. The pregnant Jaundice (Icterus *gravidarum*), occurring during pregnancy, and diſappearing after delivery.

5. The infantile Jaundice (Icterus *infantum*), occurring in infants a few days after birth.

¶ 2. *Symptomatic.*

The febrile Jaundice (Aurigo *febrilis*).

The Indian Jaundice (Aurigo *Indica*), being the natural colour, which cannot be conſidered as a diſeaſe.

CLASS IV.

LOCALES.

The primary affection of a part, not of the whole body.

ORDER I. DYSÆSTHESIÆ,

(ex δυς, *bad*, and αισθησις, *feeling*).

Derangement of the external organ, producing depravation or loſs of ſome ſenſe.

XCI. CALIGO; *vulgò*, CATARACT.

Dimneſs or loſs of ſight, from the interpoſition of an opake film between the object and the retina; fixed either in the eye itſelf or in the eyelids.

Vide vol. II. p. 190.

1. The Dimneſs of the Lens (Caligo *lentis*), from an opake ſpot behind the pupil.

2. The Dimneſs of the Cornea (Caligo *corneæ*), from opacity of the cornea.

Varying according to the diſeaſe which produces the opacity.

3. The Dimneſs of the Pupil (Caligo *pupillæ*), from obſtruction of the pupil.

4. The Dimneſs of the Humours (Caligo *humorum*), from diſeaſe or defect of the aqueous humour.

Varying according to the different ſtate of the humour.

5. The Dimneſs of the Lids (Caligo *palpebrarum*), from diſeaſe of the eyelids.

Varying according to the diſeaſe.

XCII. AMAUROSIS (ex *αμαυρωσις, obscurity*; *vulgò*, GUTTA SERENA).

Dimneſs or loſs of ſight, without apparent diſeaſe in the eye; the pupil for the moſt part dilated and immoveable.

Vide vol. I. p. 218.

1. The Loſs of Sight depending on Compreſſion (Amauroſis *compreſſionis*), after the cauſes and with ſigns of congeſtion in the brain; and

Varying according to the remote cauſe.

2. The atonic Loſs of Sight (Amauroſis *atonica*), after the cauſes, with ſigns of debility.

3. The ſpaſmodic Loſs of Sight (Amauroſis *ſpaſmodica*), after the cauſes, and with ſigns of ſpaſm.

4. The Loſs of Sight (Amauroſis *venenata*), from poiſon, internal or external.

XCIII. DEPRAVED VISION (DYSOPIA; ex *δυς, bad, and οψις, vision*).

Depraved viſion, that objects are diſtinctly ſeen, only in a certain light, at a certain diſtance, or in a certain poſition.

1. The ſpecies from Darkneſs (Dyſopia *tenebrarum*), or objects not viſible except in a ſtrong light.

2. The ſpecies from Exceſs of Light (Dyſopia *luminis*), or objects not viſible except in an obſcure light.

3. The ſpecies where the perſon is termed Near-ſighted (Dyſopia *diſſitorum*), objects not ſeen at a great diſtance.

4. The ſpecies where the perſon is termed Far-ſighted (Dyſopia *proximorum*), or very near objects not ſeen.

5. The lateral ſpecies (Dyſopia *lateralis*), or objects not viſible, except in an oblique poſition.

XCIV. DEPRAVED VISION (PSEUDOBLEPSIS; ex ψευδο, *falſe*, and βλεψις, *ſight*).

Falſe viſion, ſo that a perſon thinks he ſees objects which do not exiſt, or ſees things that do exiſt differently from what they really are.

1. The imaginary Pſeudoblepſis (*imaginaria*), or where objects appear which in reality do not exiſt.

Varying according to the thing ſeen.

2. The changing Pſeudoblepſis (*mutans*), or where exiſting objects appear in ſome degree changed.

Varying according to the particular change of the objects, and alſo according to the remote cauſe.

XCV. DEAFNESS (DYSECOEA; ex δυς, *bad*, and ακουω, *to hear*).

Vide vol. I. p. 218.

Hearing impaired or loſt.

1. The organic Deafneſs (Dyſecoea *organica*), from fault of the organs which tranſmit ſounds to the internal ear.

Alſo varying according to the fault and part effected.

2. The atonic Deafneſs (Dyſecoea *atonica*), without apparent defect in the organs tranſmitting ſounds.

Varying according to the cauſe.

XCVI. DEPRAVATION OF HEARING (PARACUSIS ; ex *παρα, wrong,* and *ακουω, to hear*).

Falſe hearing.

1. The imperfect Paracuſis (*imperfecta*), where external ſounds are perceived, but not accurately, or with the uſual conditions.

Varying,

a. With dull hearing.

b. With too exquiſite hearing.

c. With one external ſound, doubled from internal cauſes.

d. With ſounds which a perſon wiſhes to hear, not heard unleſs another ſound be at the ſame time raiſed.

2. The imaginary Paracuſis (*imaginaria*), where ſounds not exiſting without are excited by internal cauſes.

Varying according to the ſound perceived ; and alſo according to the remote cauſe.

XCVII. DEFECT OF SMELLING (ANOSMIA ; ex *α* neg. and *οσμη, ſmell*).

Smelling impaired or loſt.

1. The organic Anoſmia (*organica*), from a fault of the membrane inveſting the noſtrils ; and

Varying according to this fault.

2. The atonic Anoſmia (*atonica*), without any evident fault of the membrane inveſting the noſtrils.

XCVIII. DEFECT OF TASTING (AGHEUSTIA; ex *α* neg. and *γευομαι, to taste*).

The taſte impaired or loſt.

1. The organic Agheuſtia (*organica*), from fault in the membrane of the tongue preventing the application of ſapid bodies to the nerves.

2. The atonic Agheuſtia (*atonica*), without any evident fault of the tongue.

XCIX. DEFECT OF FEELING (ANÆSTHESIA).

The ſenſe of touch impared or loſt.

ORDER II. DYSOREXIÆ,

(ex *δυς, bad,* and *ορεξις, appetite*).

Falſe or defective appetite.

§ 1. *False Appetite.*

C. INSATIABLE HUNGER (BULIMIA; ex *βους, an ox,* and *λιμος, hunger*).

Appetite for a greater quantity of food than can be digeſted.

¶ 1. *The Idiopathic.*

1. The Bulimia of Gluttons (Bulimia *helluonum*) without diſeaſe of the ſtomach, with an appetite for a greater quantity of food than uſual.

2. The fainting Bulimia (*syncopalis*) with frequent desire of food, from a sense of hunger threatening syncope.

3. The Bulimia from vomiting (*emetica*) with desire of food in great quantity, which is immediately vomited up again.

2. *The Symptomatic.*

CI. EXCESS OF THIRST (POLYDIPSIA; ex πολυς, *much*, and διψος, *thirst*).

Præternatural thirst.

Vide vol. IV. p. 146.

CI. LONGING, OR FALSE APPETITE (PICA).

A desire of eating what is not food.

Vide vol. III. p. 46.

CII. SATYRIASIS (σατυριασις, *a distension of the penis*).

Excessive desire of venery in men.

1. The youthful Satyriasis (*juvenilis*) with præternatural desire of venery, while the body is at the same time little disordered.

2. The ungovernable Satyriasis (*furens*), with uncontrolable desire of venery, while the body is at the same time much disordered.

CIII. NYMPHOMANIA (ex νυμφη, *nymphæ*, and μανια, *inordinate passion*).

Uncontrolable desire of venery, in women.

CIV. NOSTALGIA (ex νοστεω, *to return*, and αλγος, *sick*).

A vehement desire of revisiting their native country, in persons absent from it.

Its varieties are,

1. The simple Nostalgia (*simplex*), without any other disease.

2. The complicated Nostalgia (*complicata*), accompanied with other diseases.

§ 2. *Defective Appetites.*

CVI. ANOREXIA (ex α neg. and ορεξις, *appetite*).

Want of appetite for food.

Its varieties are,

1. The humoral Anorexia (*humoralis*), from humour loading the stomach.

2. The atonic Anorexia (*atonica*), from loss of tone in the fibres of the stomach.

CVII. WANT OF THIRST (ADIPSIA; ex α neg. and διψος, *thirst*.

Total want of desire for drink.

CVIII. ANAPHRODISIA (ex α priv. and αφροδισια, *venery*).

Defect of desire for venery.

Order III. Dyscinesiæ,

(ex δυς, *bad*, and κινεω, *I move*).

Obſtructed or depraved motions, from a fault in the organs.

CIX. LOSS OF VOICE (APHONIA; ex α neg. and φονη, *voice*).

Total ſuppreſſion of the voice, without coma or ſyncope.

Its varieties are,

1. The guttural Aphonia (*gutturalis*), from ſwelling of the fauces and glottis.

2. The tracheal Aphonia (*trachealis*), from compreſſion of the trachea.

3. The atonic Aphonia (*atonica*), from injury of the nerves of the larynx.

CX. DUMBNESS (MUTITAS: ex μυτης, *dumb*).

Incapacity of ſpeaking.

Its varieties are,

1. The organic Mutitas (*organica*), from loſs or diſeaſe of the tongue.

2. The atonic Mutitas (*atonica*), from injury of the nerves of the tongue.

3. Mutitas of Deafneſs (*ſurdorum*), from being born deaf, or from loſs of hearing in early years.

CXI. PARAPHONIA (ex *παρα, wrong,* and *φωνη, ſound*).

Depraved ſound of voice.

Its varieties are,

1. The Paraphonia of Puberty (*puberum*), or the voice changed, about the age of puberty, from an acute and ſoft to a grave and harſh tone.

2. Paraphonia, with Hoarſeneſs (*rauca*), from dryneſs or flaccid tumour of fauces, the voice hoarſe and rough.

3. The reſounding or naſal Paraphonia (*reſonans*), from obſtruction in the noſtrils, the voice rough, with a hiſſing ſound in the noſe.

4. The rough palatine Paraphonia (*palatina*), from the uvula being wanting or divided, and in general attended with a hare-lip; the voice rough, obſcure, and diſagreeable.

5. The ringing Paraphonia (*clangens*); the voice aſſuming an acute, ſhrill, and weak tone.

6. The ſnoring Paraphonia (*comatoſa*), from laxity of the velum palati and of the glottis; a ſound emitted at inſpiration.

CXII. PSELLISMUS (ex *ψιλισμα, hesitation of ſpeech*).

Faulty articulation.

Its varieties are,

1. The ſtammering Pſelliſmus (*hæſitans*), or where, in ſpeaking, the words, and chiefly the firſt words, are with difficulty uttered, and the firſt ſyllable only frequently repeated.

2. The ringing Pfelliſmus (*ringens*); or, where the ſound of the letter R is always aſpirated, and, as it were, doubled.

3. The lallant Pfelliſmus (*lallans*), the ſound of the letter L made more ſoft, or pronounced inſtead of the letter R.

4. The ſoft Pfelliſmus (*emolliens*), the harſher letters changed into ſofter ones, and the letter S much uſed.

5. The balbutient Pfelliſmus (*balbutiens*), from a large or ſwoln tongue, and when the labial letters are much ſounded, and often uſed inſtead of others.

6. The labid Pfelliſmus (*acheilos*), or impoſſibility or difficulty of pronouncing the labial letters.

7. The guttural Pfelliſmus (*lagoſtomatum*), where, from the palate being divided, the guttural letters are not juſtly pronounced.

CXIII. STRABISMUS (ex στραβίζω, *to ſquint*).

The optic axes of the eyes not converging.

Its varieties are,

1. The habitual Strabiſmus (*habitualis*), from a depraved cuſtom of uſing one eye only.

2. The accommodating Strabiſmus (*commodus*), from debility or greater mobility of one eye, ſo that both cannot be mutually employed.

3. The unavoidable Strabiſmus (*neceſſarius*), from altered ſituation or figure of certain parts of the eye.

CXIV. DYSPHAGIA (ex δυς, *bad*, and φαγω, *to eat*).

Impeded deglutition, without phlegmaſia or the reſpiration being affected.

CXV. CONTRACTION (CONTRACTURA).

The continued and rigid contraction of one or more of the joints.

Its varieties are,

1. The primary Contraction (*Contractura primaria*), from the muſcles being contracted and rigid, in conſequence of

   a. Inflammation.

   b. Spaſm.

   c. Paralyſis of their antagoniſts.

   d. Irritating acrimony.

2. The articular contraction (*articularis*), from rigidity of a joint.

ORDER IV. INCREASED DISCHARGES (APOCENOSES, ex *αποκινεω*, *I move from*).

Unuſual flux of blood or other humours, without fever or increaſed force of circulation.

CXVI. PROFUSIO.

Flux of blood.

CXVII. EPHIDROSIS, (ex *εφιδρωσις*, *abundant in water*).

Exceſſive ſweating.

CXVIII. EPIPHORA (ex επιφορα, *a flood*).

Morbid flow of tears, or the lacrymal fluid.

¶ 1. The Idiopathic.

2. The Symptomatic.

CXIX. SALIVATION (PTYALISMUS, ex πτυαλιζω, *to spit often*).

Morbid discharge of saliva.

CXX. ENURESIS (ex ενυρεω, *to be unable to retain urine*).

Involuntary flow of urine without pain.

1. The atonic Enuresis (*atonica*), after diseases injuring the sphincter of the bladder.

2. Slow irritation (Enuresis *irritata*), in consequence of compression or irritation of the bladder.

Vide vol. II. p. 323.

CXXI. GONORRHŒA (ex γονη, *the seed*, and ῥεω, *to flow*).

In men, a morbid discharge of fluid from the urethra, with or without venereal desire.

Vide vol. I. p. 132.

1. The pure (Gonorrhœa *pura*), without previous impure copulation, flux of a humour-like pus from the urethra, without suppression of urine or libidinous inclination.

2. The impure (Gonorrhœa *impura*), after impure co-

pulation, flux of a puriform humour from the urethra, with difficulty of making water.

This is followed by

The mucous Gonorrhœa, or gleet (*mucoſa*), after Gonorrhœa impura, flux of a mucous humour from the urethra, with little or no difficulty of making water.

A Gleet.

3. Great debility, termed Seminal Weakneſs (Gonorrhœa *laxorum*), diſtillation of a humour, in general pellucid, from the urethra, without erection of the penis, but with libidinous inclination when the perſon is awake.

4. The ſleeping Gonorrhœa (*dormentium*), emiſſion of the ſeminal fluid, with erection and luſtful inclination of perſons aſleep, from impure dreams.

Spurious ſpecies, where there is no flux from the urethra.

Order V. Epischeses,

(ex επισχω, *to ſtop*).

Suppreſſion of Excretions.

CXXII. OBSTIPATIO.

No diſcharge of fæces, or but ſeldom.

Vide vol. I. p. 209.

1. The obſtipation from weakneſs (*debilium*), in perſons of a lax, weak, and in general dyſpeptic habit.

2. Obſtipation from rigidity (*rigidorum*), in perſons of a rigid, often hypochondriac temperament.

3. The Obſtipation from obſtruction (*obſtructorum*), with ſymptoms of colic.

CXXIII. ISCHURIA (ex *εσχω to reſtrain*, and *ουρον, urine*).

Vide vol. II. p. 318.

1. The renal Suppreſſion (Iſchuria *renalis*), ſucceeding diſeaſe of the reins, with pain or uneaſy ſenſation of weight in the region of the reins, and without ſwelling of the hypogaſtrium, or deſire of making water.

2. The ureterical Suppreſſion (Iſchuria *ureterica*), ſucceeding diſeaſe of the reins, with pain or uneaſy ſenſation in ſome part of the ureters, and without ſwelling of the hypogaſtrium, or deſire of making water.

3. The veſicular, or water-ſuppreſſion (Iſchuria *veſicalis*), with ſwelling of the hypogaſtrium, pain at the neck of the bladder, and frequent deſire of making water.

4. The urethral Suppreſſion (Iſchuria *urethralis*), with ſwelling of the hypogaſtrium, frequent deſire of making water, and pain in ſome part of the urethra.

CXXIV. DYSURIA (ex *δυς, difficult*, and *ουρον, urine*).

Painful, and ſometimes obſtructed emiſſion of urine.

Vide vol. II. p. 318.

1. The ardent (Dyſuria *ardens*), with burning heat in the urine, without any evident diſeaſe of the bladder.

2. The ſpaſmodic (Dyſuria *ſpaſmodica*), from ſpaſm of other parts communicating with the bladder.

3. The Dyſuria from compreſſion (*compreſſionis*), from preſſure of the bladder by the neighbouring parts.

4. The inflammatory (Dyſuria *phlogiſtica*), from inflammation of the adjacent parts.

5. The Dyſuria from irritation (*irritata*), with ſymptoms of the ſtone.

6. The mucous Dyſuria (*mucoſa*), with copious excretion of mucus.

CXXV. DYSPERMATISMUS (ex δυς, *bad*, and σπερμα, *ſeed*).

In the venereal act, the emiſſion of ſemen flow, obſtructed, or inſufficient for the purpoſe of generation.

1. The urethral Dyſpermatiſmus (*urethralis*), from diſeaſe of the urethra.

2. The knotty or nodoſe Dyſpermatiſmus (*nodoſus*), from nodes in the corpora cavernoſa.

3. The preputial Dyſpermatiſmus (*præputialis*), from too narrow opening of the prepuce.

4. The mucous Dyſpermatiſmus (*mucoſus*), from mucus clogging the urethra.

5. The over-erected Dyſpermatiſmus (*hypertonicus*), from too great erection of the penis.

6. The epileptic Dyſpermatiſmus (*epilepticus*), from ſpaſmodic epilepſy, coming on in coitu.

7. The indolent Dyſpermatiſmus (*apractodes*), from ſluggiſhneſs of the genitals.

8. The refluent Dyſpermatiſmus (*refluus*), no emiſſion of ſemen in coitu, occaſioned by its reflux out of the urethra into the bladder.

With regard to the Dyſpermatiſmus ſeroſus, I am not certain.

CXXVI. AMENORRHŒA (ex α neg. and μην, *the menſes*).

Vide vol. I. p. 105.

The menſes, in women not pregnant, either ſmaller in quantity than common, or totally obſtructed.

1. Green ſickneſs (Amenorrhœa *emanſionis*), in females, after the age of puberty, the menſes not appearing, with, at the ſame time, various morbid affections.

2. The ſuppreſſion of the Menſes (Amenorrhœa *ſuppreſſionis*), in adults, ſuppreſſion of the menſes, after they have appeared.

3. The difficult diſcharge of Menſes (Amenorrhœa *difficilis*, the menſes flowing but in ſparing quantity, and with pain.

Order VI. Tumores.

Increaſed bulk of a part without inflammation.

CXXVII. ANEURISMA (ex ανευρισμος, *dilatation*).

Soft tumor, with pulſation, on an artery.

Vide vol. II. p. 82.

CXXVII. VARIX.

Soft tumor, without pulſation, on a vein.

CXXIX. ECCHYMOMA (ex εχυμοσις, *extravaſation of blood*).

Diffuſe tumor, little elevated and ſomewhat livid.

CXXX. SCIRRHUS (ex σκιῤῥος, *a chip of marble*).

Hard tumor of a particular part, moſtly of a gland, without pain.

Vide vol. II. p. 259 and 294.

CXXXI. CANCER.

Painful ſcirrhous tumor, ending in a foul ulcer.

Vide vol. II. p. 204; and vol. II. p. 113.

CXXXII. BUBO (ex *βουβων, a swelling in the groin*).

Suppurating tumor of a conglobate gland.

Vide vol. I. p. 154; vol. II. p. 132.

CXXXIII. SARCOMA (ex *σαρξ, flesh*).

Soft excrescence, not painful.

CXXXIV. VERRUCA.

Hard, rough excrescence.

Vide vol. II. p. 157.

CXXXV. CLAVUS.

Lamellated induration of the cuticle.

Vide vol. II. p. 144.

CXXXVI. LUPIA.

Moveable swelling under the skin, soft, and not painful.

CXXXVII. GANGLION.

Hard, moveable swelling, seated on a tendon.

Vide vol. II. p. 152.

CXXXVIII. HYDATIS (ex *ὑδατις, a bladder*).

Vesicle upon the skin, full of an aqueous humour.

Vide vol. II. p. 144.

CXXXIX. HYDARTHRUS (ex *ὑδωρ, water*, and *αρθρον, a joint*).

Tumor of the joints, chiefly of the knee, not much raised at first, of the same colour with the skin, very painful, and diminishing the power of motion.

Vide vol. II. p. 154.

CXL. EXOSTOSIS, (εξ, and οστεον, *a bone*).

Hard tumor, ſeated on a bone.

Vide vol. II. p. 161.

ORDER VII. ECTOPIÆ (ex εκτοπιζω, *I thruſt out*).

A ſwelling ariſing from a part thruſt out of its proper place.

CXLI. HERNIA.

Ectopia of a ſoft part, ſtill covered with the ſkin and other integuments.

Vide vol. II. p. 286.

CXLII. PROLAPSUS.

Ectopia of a ſoft part, not covered.

Vide vol. II. p. 326.

CXLIII. LUXATIO.

A bone thruſt out of its proper place.

Vide vol. II. p. 356.

ORDER VIII. SOLUTIONS OF CONTINUITY (DIALYSES, ex διαλυο, *to diſſolve*).

Diviſion of a part, manifeſt to inſpection or feeling.

CXLIV. A WOUND (VULNUS).

A recent ſolution of ſubſtance in a ſoft part, the effect of external injury.

Vide vol. II. p. 9.

CXLV. ULCUS.

A chronic ſolution of a ſoft part, with a vitiated diſcharge.

Vide vol. II. p. 88.

CXLVI. HERPES.

Numerous puſtules, or little ulcers, in cluſters, ſpreading, and difficult to heal.

Vide vol. I. p. 220; vol. II. p. 109; and vol. IV. p. 120.

CXLVII. TINEA.

Small ulcers at the roots of the hair, upon the ſcalp, diſcharging a humour, and ending in a whitiſh, crumbly ſcab.

Vide vol. I. p. 222.

CXLVIII. PSORA.

Puſtules and ſmall itchy ulcers, contagious, affecting the hands,

Vide vol. I. p. 223.

CXIX. FRACTURE (FRACTURA).

A part or parts of a bone violently ſeparated into fragments.

Vide vol. II. p. 339; and vol. IV. p. 164.

CL. CARIES.

Ulcerated ſtate of a bone.

Vide vol. II. p. 99.

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